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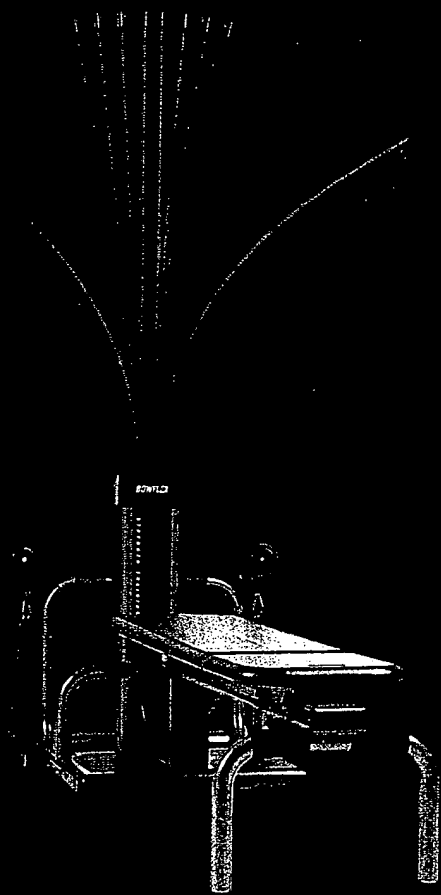
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BOWFLEX® POWER PRO®

FOR ALL POWER PRO MODELS



**Dr. Ellington Darden's
6 Week Fast Fat Loss -
Body Leanness Program.**

Owner's Manual & Fitness Guide

BOWFLEX® FITNESS

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Fast Fat Loss Now

The Bowflex Body Leanness Program

By Dr. Ellington Darden53

Getting To Know Your Machine

1

CONGRATULATIONS on your commitment to fitness! By choosing Bowflex to be your partner, you've chosen a machine that can deliver on its promises!

The resistance and aerobic training that can be performed on the Bowflex is unmatched by any other single piece of home fitness equipment available. You have definitely made the right decision!

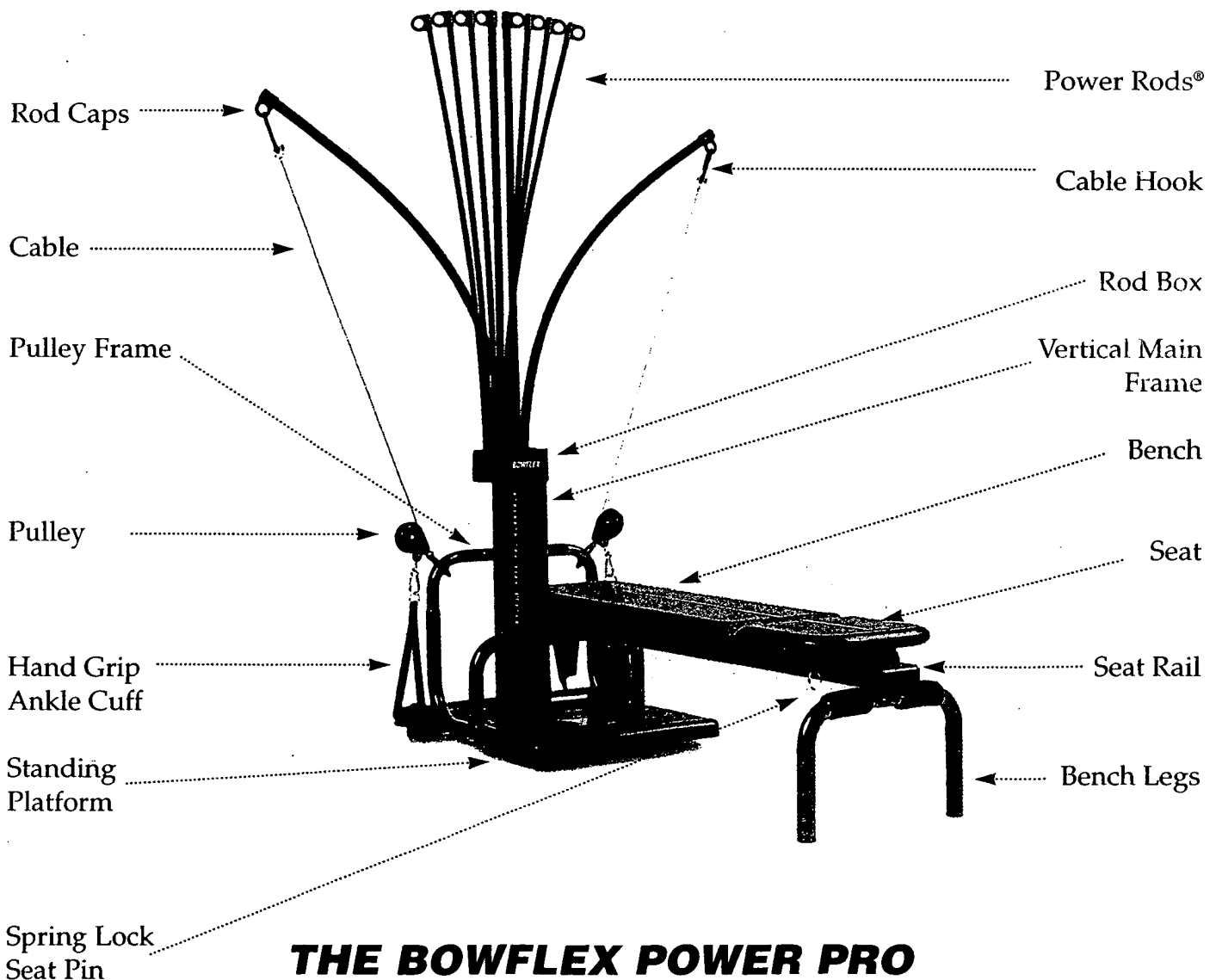
In this owner's manual you will find detailed information on a wide variety of exercises, workout programs and a very specialized program titled, "FAST FAT LOSS NOW" by Dr. Ellington Darden.

before attempting to use your Bowflex. It is important that you understand how to properly perform each exercise before you attempt to perform the exercise with the Power Rod® Resistance attached to the cables.

With all of the fitness choices available today, we understand that choosing a piece of equipment can be very confusing. Everyone at Bowflex, Inc. would like to thank you for your trust and your confidence in our product. Bowflex is as good as we say it is, and you're just about to prove it to yourself.

Again, thank you for choosing Bowflex.

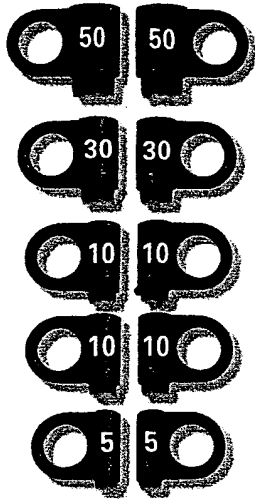
Please take your time to read through the entire manual



Using Your Machine

Power Rod® Resistance

Power Rods are made from a special composite material. Your rods are sheathed with a protective black rubber coating. Each rod is marked with it's weight rating on the "Rod Cap".



Adjusting And Understanding The Resistance

The standard Bowflex comes with 210 pounds of resistance (one pair of 5 pound rods, two pair of 10 pound rods, one pair of 30 pound rods, and one pair

of 50 pound rods). If you upgraded to a 310 or 410 pound capacity you will have an additional one or two pair of 50 pound Power Rods, respectively.

Hooking The Power Rods® To The Cables:

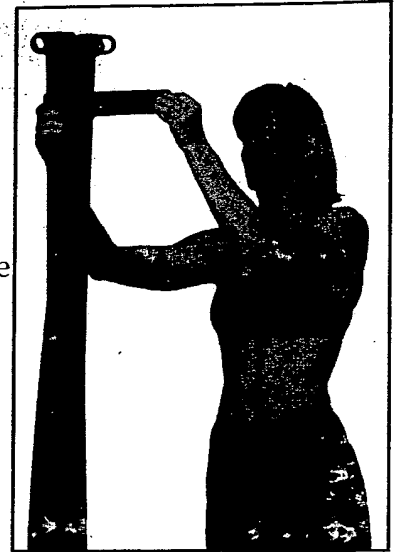
You may use one rod or several rods in combination, to create the desired resistance level. To hook multiple rods up to one cable, simply bend the furthest forward rod toward the cable and place the cable hook through the rod cap. Now you can hook up the next furthest back rod.



Hooking up the most forward rod prevents rods from crossing over the top of one another.



When You Are Not Using Your Bowflex
Disconnect the cables from the Power Rods when you are not using your Bowflex. Use the rod binding strap included with your machine to bind all the rods together at the top. Place your cables and grips through the strap to keep them out of the way.

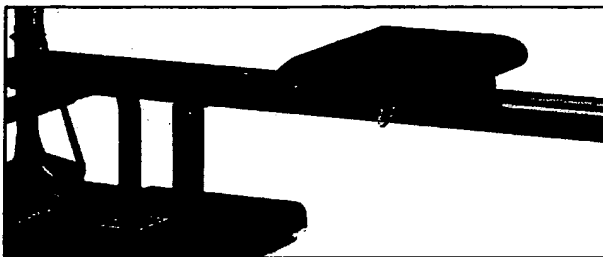


**To Order
Additional Sets
Of 50 lb Power
Rods® Please Call 1-800-269-3539**

Using Your Machine

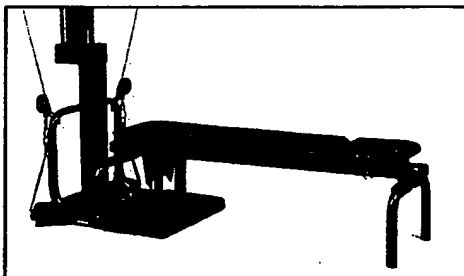
The Workout Bench

Your Bowflex has four different bench positions. To adjust the bench, simply locate the spring lock pin on the side of the seat portion of the bench. Pull out pin to release seat, then slide it to the desired position. Pull out pin, give it half a turn, and release to place it in a "free sliding" position for exercises such as rowing.

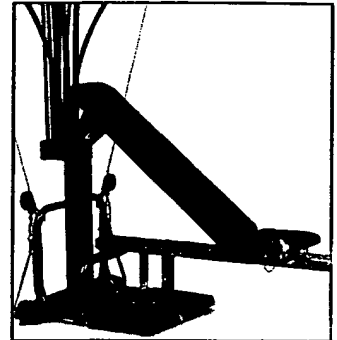


Quick Release Bench: The long portion of your bench attaches and releases from the seat portion very easily. To attach it, simply insert the half hinge on the end of the bench into the half hinge on the seat. For "standing" exercises, simply remove the bench by lifting up on the long portion and pulling away from seat.

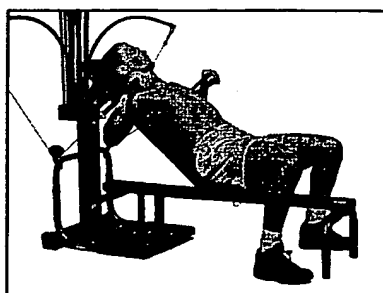
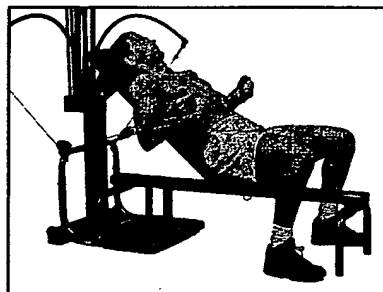
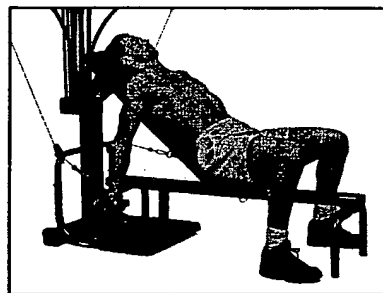
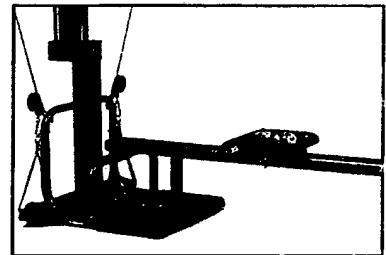
Flat Position 1 & 2: Along the side of the seat rail there are three holes for the spring lock seat pin. Pull out on the pin and slide the entire bench forward until the spring lock seat pin locks into a hole. With the bench in the flat position there are two possible holes for the spring lock pin to lock into, one forward and one back.



Incline Position: Start with the bench flat in the the furthest position away from the Power Rods®. Pull out on the spring lock seat pin and lift the long bench pad up. Slide forward until the pin locks into the furthest forward hole. Rest the bench's incline support bracket on the base of the Power Rods®.



"Free Sliding" Position: Remove the long portion of the bench. Pull out on the spring lock seat pin, give it a half turn, and release to place it in a "free sliding" position for exercises such as rowing.



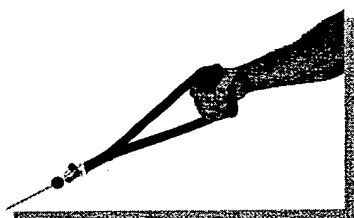
Mounting The Incline Bench: Sit on the bench and reach back, one arm at a time, grasping hand grips **KEEPING HANDS DOWN AND PALMS UP.** Curl your hands up as towards the front of your shoulders **AND** turn your wrists so that your palms now face away from you. The cables will now be over your elbows.

Using Your Machine

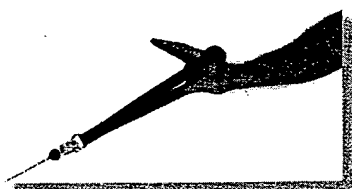
Using the Bowflex Hand grips

The Bowflex hand grips can be used as regular grips, hand cuffs or ankle cuffs, depending on how they are configured.

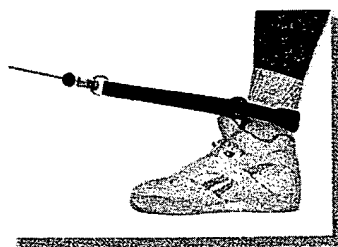
Regular Grip: Grasp the main portion of the grip without inserting your hand through the cuff portion. Most of the exercises you perform utilize this grip.



Hand Cuff Grip: Slip your hand through the cuff portion of the grip so that the foam pad rests on the back of your hand. Then grasp the remainder of the grip that is sitting in your palm. This method of gripping is great for exercises like front shoulder raises or any exercise where your palm is facing down.

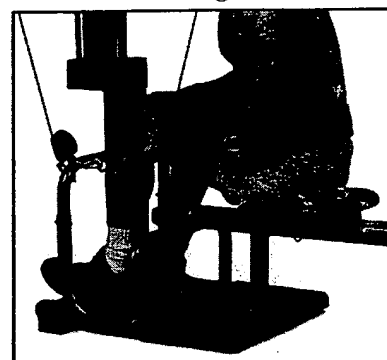


Ankle Cuff Grip: The cuff portion of the grip stretches apart from the handle portion of the grip. Simply insert your hand in the cuff and pull apart from the handle. Insert your foot or ankle and tighten grip up by pulling handle portion toward the cuff portion.



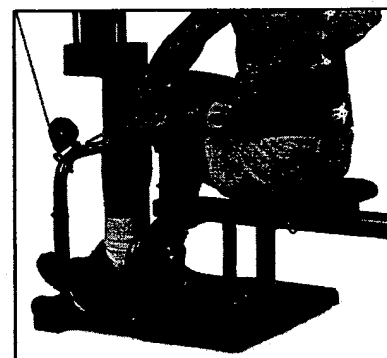
Using The Bowflex Leg Press Belt

The Leg Press Belt is used exclusively for the Leg Press and the Seated Hamstring Curl exercises.



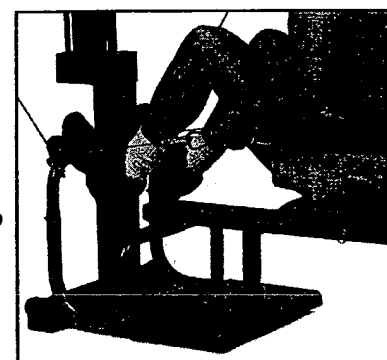
- With the Bowflex seat adjusted to the "free sliding" position, (spring lock seat pin unlocked) the hand grips removed, and the desired amount of resistance hooked up, sit on the seat and position the leg press belt around your hips.

- Slide forward to the pulleys and place your feet through the right and left openings under the pulleys.



- Attach the belt to the cables and cinch the adjustment strap on the belt by pulling the strap until the belt is taut.

- Place hands on vertical main frame and push yourself back while placing feet, one at a time, onto non-skid pads on pulley frame.

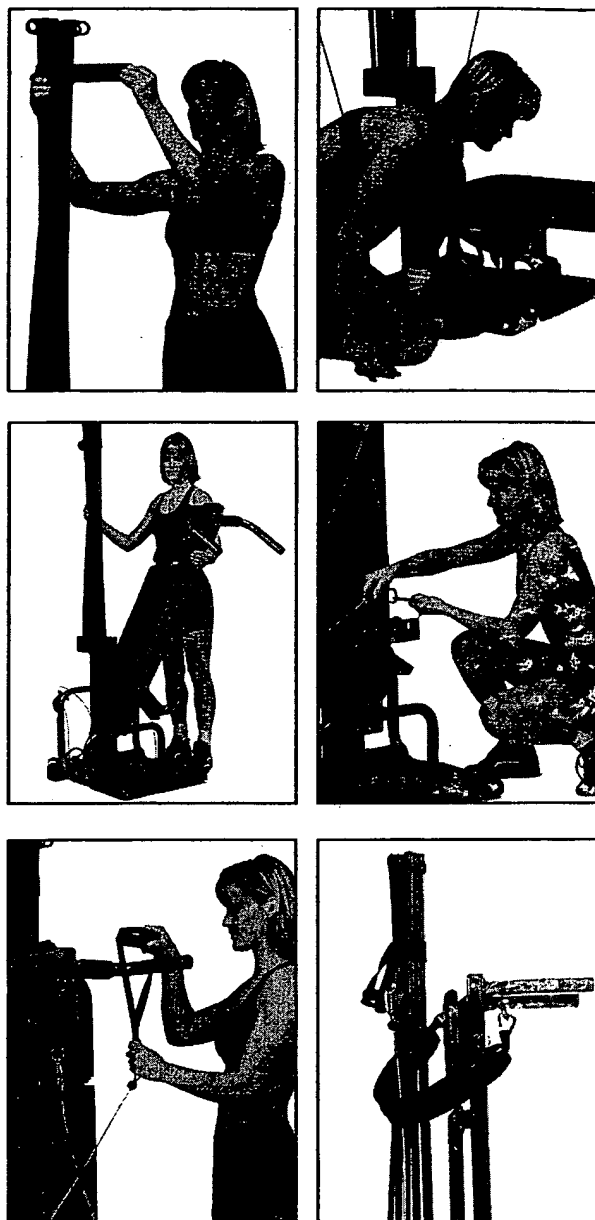


- Grasp belt near where it's attached to the cables and begin to press back.

Using Your Machine

Folding & Moving Bowflex: Folding and moving your Bowflex is easy. Follow the simple steps below to fold your Bowflex. Once it's folded, simply tilt the machine back on it's transport wheels to roll the machine to any location

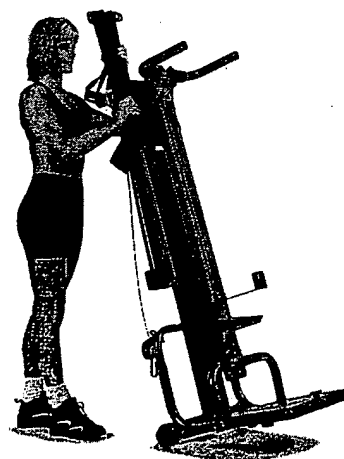
- Bind the Power Rods® with the rod binding strap.
- Remove the threaded knob on the platform.
- Tilt the bench up to the Power Rods®.
- Link the two hooks on the end of the cables together, over the top of the incline support bracket on the bench.
- Slide hand grips over opposite bench legs, crossing the cables to do so.
- Wrap the Leg Press Belt around Power Rods® and link hooks to D-rings on hand grips.



Maintenance & Care Of Your Bowflex: Your Bowflex requires very little maintenance. To keep your Bowflex in top condition check all fasteners and Rod Caps before each workout and tighten as needed.

Clean the bench with a non abrasive cleaner after each use. This will keep it looking new. Any non abrasive household cleaner or soap works well. Many automotive interior cleaners make surfaces too "slick" and should not be used.

If you have any questions regarding maintenance please call our customer service department at 1-800-269-3539.

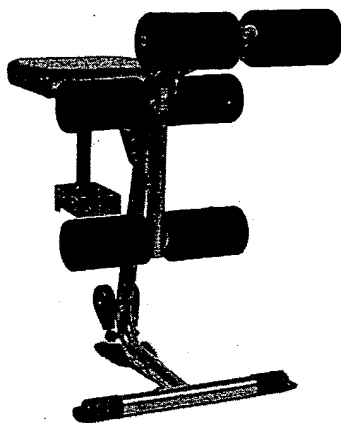


Optional Equipment

Bowflex, Inc. is constantly working to provide you with the latest innovation and information to help you reach your goals.

The Bowflex Leg Extension / Leg Curl Attachment

This attachment is designed to add more effectiveness to all exercise routines where "leg work" is required.



Safety

- Before using the attachment make sure that all fasteners are in place and tightened.
- Make sure that the attachment's cables are securely fastened to the regular Bowflex cables.

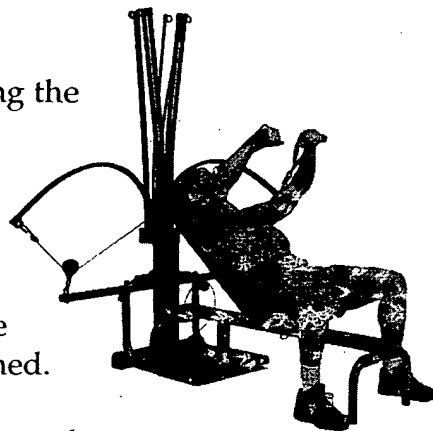
- Always use the supplied pin to secure the attachment to your Bowflex.

The "Purvis" Pec Bar

This attachment is specifically designed to enhance the bench press and shoulder press exercises by changing the angle of resistance. The attachment is mounted on the rear of the machine and serves to widen the angle of resistance to create a more effective exercise.

Safety

- Before using the attachment make sure that all fasteners are in place and tightened.



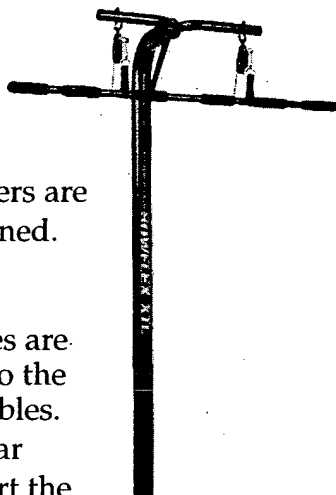
- Please remove the attachment when not in use.

The Bowflex Lat Pulldown Attachment.

This attachment enhances several "Back" exercises and "Triceps" exercises.

Safety

- Before using the attachment, make sure that all fasteners are in place and tightened.
- Make sure that the attachment's cables are securely fastened to the regular Bowflex cables.
- Always use the "Bar Holders" to support the lat pulldown bar or remove the bar when not in use.



WARNING!

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Before beginning any exercise program consult your physician or health care professional. Only he or she can determine the exercise program that is appropriate for your particular age and condition. If you experience any lightheadedness, dizziness, or shortness of breath while exercising, stop the exercise and consult your physician.

For Your Safety Please Follow These Instructions

Keep your body weight on the machine, bench, or standing platform while exercising.

When using the Bowflex for standing leg exercises, always grasp the power rods for stability.

Keep out of the path of the Power Rods® when exercising and make certain that observers also stand clear of the Bowflex when the Power Rods® are in use.

Never move or adjust the bench while sitting or lying on the Bench. Never stand on the bench.

Before exercising, make sure that the spring lock seat pin is securely fastened and the bench is firmly in place.

Inspect your machine before each workout. Periodically check all fasteners to make sure none have loosened with use. Tighten if necessary.

When hooking up Power Rods® do not stand directly looking over the top of the rods. Stand off to the side while attaching rods.

Never attempt to exercise with more resistance than you are physically able to handle.

Keep cables and Power Rods® bound with the rod binding strap when the Bowflex is not in use.

Defining Your Goals

Your body will do what you train it to do. That's why it's important to define your goals and focus on those goals. Here are some fitness components that will help you define your goals and choose your fitness program.

Muscle Strength is the maximum force that you can exert against resistance at one time. Your muscle strength comes into play when you pick up a heavy bag of groceries or lift a small child. It is developed when a localized muscle is worked both positively (concentric) and negatively (eccentric) at a resistance - great enough so you can perform only five to eight repetitions of the exercise before the muscle fails. Each set of repetitions is followed by a rest interval that typically runs three times longer than the set. Later, between exercise sessions, the muscle overcompensates for the stress and usually increases in both strength and size.

Muscle Endurance is the ability to perform repeated contractions. It comes into play when you cross-country ski or work on your feet all day. Endurance training addresses the slow twitch, endurance muscle fibers, which depend on oxygen for energy. To develop muscle endurance, use low resistance and high repetitions - about 15-20 repetitions in each set, three sets to each exercise, working the muscle only to fatigue.

Muscle Power is the combination of strength and speed of the muscular contraction. This is often misinterpreted as a) Being directly associated with certain skill or sport and/or b) Meaning that you must *move* fast. Load is actually a more important factor than speed when attempting to improve power. When training to achieve muscular power, pick a resistance that fatigues you in the 3-5 repetition range. When performing these reps, it is more important to think of *contracting the muscles faster* rather than attempting to move faster. Performing *sport simulation* exercises usually results in a deterioration of the motor pattern or skill. The biomechanically sound method of improving power in your sport is to train for

power using the correct joint movements, as described in this manual. Then practice the skill associated with your sport, learning to apply this newly achieved power.

Body Composition is the ratio of fat weight (fat) to lean weight (muscles, bones and tissue). As you age, the ratio shifts. The fat weight increases and the lean weight decreases. Training for muscle strength will generally increase muscle size and aerobic conditioning will help burn extra calories. Performing these two forms of exercise, either at different times or together, will create the greatest changes in body fat weight.

Balanced Strength and alignment is the result of equal strength developed in all parts of the body. It comes into play in your standing and sitting posture, and in your ability to perform just about any activity safely and effectively. An over-development of the back will round the shoulders; weak or stretched abdominals can cause lower back pain. You want a balance of muscle strength in front and back. In addition, you need a balance of strength between your middle, lower, and upper body.

Flexibility is the ability of a muscle or group of muscles to move the joint through a full range of motion. Flexibility comes into play when you execute an overhand serve or stretch for the top shelf in the kitchen. It is a cooperative movement of opposite muscle groups. When a muscle contracts, its opposite muscle group must relax for the action to occur. Increased flexibility means an increased range of motion, made possible by this simultaneous contracting and relaxing. Good flexibility is important in protecting the body from injury and can be achieved through the balanced strength training programs that are included in this manual.

Cardiovascular Endurance is the ability of the heart and lungs to supply oxygen and nutrients to exercising muscles over an extended period of time. It comes into play when you jog a mile or ride a bike. It is a critical component of overall fitness and health. Any exercise program must be supplemented with cardiovascular training, such as rowing on the Bowflex.

Reaching Your Goals

To reach your goals you must follow a consistent, well designed program that provides balanced development to all parts of the body and includes both aerobic and strength exercise. Only then will you meet your goals safely and efficiently.

The workout routines found in this manual are professionally designed and written to target specific fitness goals. Should you not find one specific program to your liking, you can design your own, based on sound information and the principles found in this manual.

Designing Your Own Program

You may want to design your own personal program specifically geared to your goals and lifestyle. Designing a program is easy, as long as you follow these guidelines.

Understand fitness and its components:

Improperly designed programs can be dangerous. Take some time to review this manual as well as other fitness guides.

Know your current fitness level: Before you start any fitness program you should consult a physician who will help you determine your current abilities.

Identify your goals: Goals are critical to choosing and designing an exercise program that fits and enhances your lifestyle, but so is

strategy. It's important not to rush the process and try to accomplish too much too soon. That will lead to setbacks and discouragement. Instead, set a series of smaller achievable goals.

Select complementary exercises: Be sure to pair exercises that address compound joint movements and single joint movements. In addition, select exercises that address complimentary muscle groups.

Put first things first: During each session work those muscle groups that need the most training, first.

Remember your cardiovascular component: Any fitness program must contain a cardiovascular fitness component to be complete. So complement your resistance training with aerobic exercise such as walking, running, bicycling or rowing on the Bowflex.

Training Variables: When designing your own program there are several variables that, when mixed properly, will equal the right fitness formula for you. In order to find the best formula, you must experiment with several combinations of variables.

The variables are as follows.

- **Training Frequency:** The number of times you train per week. We recommend daily activity but not daily training of the same muscle group.
- **Training Intensity:** The amount of resistance used during your repetition.
- **Training Volume:** The number of repetitions and sets performed.
- **Rest intervals:** The time you rest between sets and the time you rest between workouts.

Once you've established a base of fitness, follow these basic principles.

- **Isolate muscle groups:** Focus work on specific muscle groups.
- **Progressive Loading:** The gradual systematic increase of repetitions, resistance and exercise period.

Working Out

A workout begins in your mind's eye. With concentration and visualization you can approach your workout with a positive, constructive attitude. A good pre-workout mental routine is to sit and relax, so you can focus on what you are about to do and think about achieving your end goal.

Warming Up

We recommend that you warm up by rowing on the Bowflex.

Aerobic Rowing

Position:

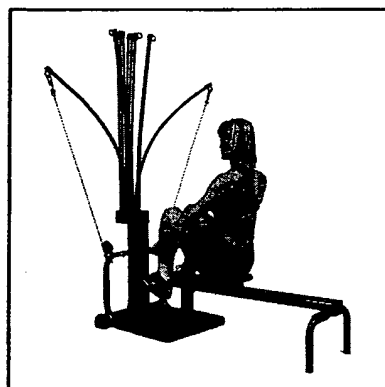
- Remove bench, unlock the seat.
- Sit on the seat facing the power rods.
- Grab the handles and keep the arms straight to the front.
- Place the toes on the lower frame and heels on the platform, knees bent comfortably.
- Sit up straight with your spine in good alignment.

Action:

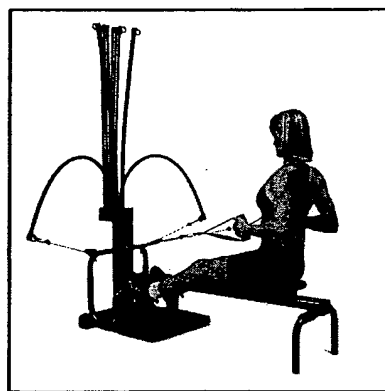
- Initiate the movement by extending the knees while simultaneously bending the arms and pinching the shoulder blades together.
- With the arms passing by the sides of your trunk, the handles should be near your torso as the knees near extension.

Key Points:

- Do not lose spinal alignment - keep your chest lifted.
- If you bend forward during the return toward the power rods, bend at the hips, not the waist.



START



FINISH

Breathing

The most important part of breathing during exercise is, quite simply, that you do it. Breathing in or out during the actual performance is not dependent upon the direction of air flow relative to exertion. It is, in fact, a mechanical process that changes the position of your spine as your rib cage moves. Here are some tips for breathing:

- 1) Be cautious when you are concentrating or exerting effort. This is when you will probably hold your breath. **DO NOT** hold your breath. Do not exaggerate breathing. Depth of inhalation and exhalation should be natural for the situation.
- 2) Allow breathing to occur, naturally, don't force it.

Performing Your Routine

The workout portion of your fitness routine is the series of exercises devoted to your particular goals. Remember, make sure to have fun!

Cool Down

An essential part of the exercise routine is the cool down.

Gradually reduce the level of exercise intensity so that blood does not accumulate in one muscle group, but continues to circulate at a decreasing rate. We recommend the rowing exercise for the cool down. Remember to gradually move yourself into a relaxed state.

20 MINUTE BETTER BODY WORKOUT

FREQUENCY: 3 DAYS PER WEEK (M-W-F) TIME: ABOUT 20 MINUTES

Start by performing one set of each exercise. Warm up with a light resistance that you can perform easily for 5-10 reps without fatiguing. Focus on practicing and learning your technique before increasing the resistance. Then move to a more challenging resistance that you can perform no less than 10 reps and no more than 15 reps without your form deteriorating. As you become stronger, you can advance to two sets for each exercise. Complete all sets of each exercise before moving on to the next one. Rest 30 to 45 seconds between sets. Move slowly on each rep. Use a pace that would allow you to stop the movement instantly at any point in the rep. Count three seconds up and three seconds down and work to fatigue during each set.

Body Part	Exercise	Sets	Reps	Page
Chest	Bench Press	1-2	10-15	18
Back	Seated Lat Rows	1-2	10-15	30
Shoulders	Rear Deltoid Rows	1-2	10-15	22
Arms	Standing Biceps Curl	1-2	10-15	37
	Lying Triceps Extension	1-2	10-15	35
Legs	Leg Press	1-2	10-15	46
	Seated Leg Curl	1-2	10-15	48
Trunk	Functional Low Back Extension	1-2	10-15	29
	Seated (resisted) Abdominal Crunch	1-2	10-15	43

ADVANCED GENERAL CONDITIONING

FREQUENCY: 4 DAYS PER WEEK (M-T-Th-F) TIME: ABOUT 35-45 MINUTES

When you are proficient in performing the exercise techniques of the above routine and are no longer realizing results, or have become just plain bored, it is time to change your program. You can increase your training with this "split system" routine that works opposing muscle groups on different days. To do this, you'll increase your resistance when you can perform 12 reps perfectly, and you'll increase your volume by performing more sets and more exercises. Move slowly on each rep. Use a pace that would allow you to stop the movement instantly at any point in the rep. Count three seconds up and three seconds down and work to fatigue during each set.

Day 1 & 3

Body Part	Exercise	Sets	Reps	Page
Chest	Bench Press	1-3	10-12	18
Shoulders	Seated Shoulder Press	1-3	10-12	21
Arms	Lying Triceps Extension	1-3	10-12	35
	French Press	1-3	10-12	35
Legs	Leg Press	1-3	10-12	46
	Seated Leg Curl	1-3	10-12	48
	Seated (straight leg) Calf Raise	1-3	10-12	49

Day 2 & 4

Body Part	Exercise	Sets	Reps	Page
Back	Seated Lat Rows	1-3	10-12	30
	Lying Lat Pulldowns	1-3	10-12	30
Shoulders	Rear Deltoid Rows	1-3	10-12	22
Arms	Standing Biceps Curl	1-3	10-12	37
	Reverse Curl	1-3	10-12	37
Trunk	Functional Low Back Extension	1-3	10-12	29
	Seated (resisted) Abdominal Crunch	1-3	10-12	43

The Workouts

20 MINUTE UPPER/LOWER BODY

FREQUENCY: 4 DAYS PER WEEK (M-T-Th-F) TIME: ABOUT 20 MINUTES

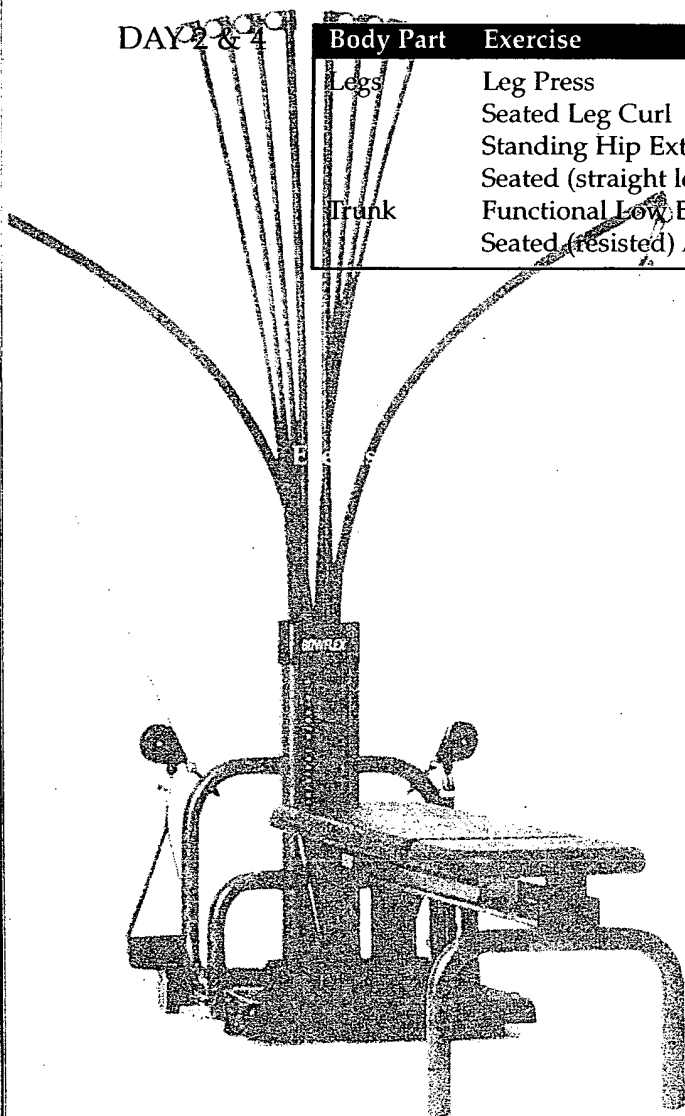
This program provides you with a quick and effective workout that combines muscle conditioning with some cardiovascular benefits. Do this routine when you are limited in time or just want a variation to your normal routine. Perform this program training 2 days, resting 1 to 2. Perform all exercises to near failure, stopping at the point that your technique starts to deteriorate. Rest only 20-30 seconds between sets. As you get stronger, increase the number of sets you perform. Move slowly on each rep. Use a pace that would allow you to stop the movement instantly at any point in the rep. Count three seconds up and three seconds down.

DAY 1 & 3

Body Part	Exercise	Sets	Reps	Page
Chest	Bench Press	1-3	12-15	18
Back	Seated Lat Rows	1-3	12-15	30
Shoulders	Rear Deltoid Rows	1-3	12-15	22
Arms	Standing Biceps Curl	1-3	12-15	37
	French Press	1-3	12-15	35

DAY 2 & 4

Body Part	Exercise	Sets	Reps	Page
Legs	Leg Press	1-3	12-15	46
	Seated Leg Curl	1-3	12-15	48
	Standing Hip Extension	1-3	12-15	48
	Seated (straight leg) Calf Raise	1-3	12-15	49
Trunk	Functional Low Back Extension	1-3	12-15	29
	Seated (resisted) Abdominal Crunch	1-3	12-15	43



The Workouts

13

BODY BUILDING

FREQUENCY: 3 DAYS ON, 1 DAY OFF TIME: ABOUT 45-60 MINUTES

Body building requires focused concentration and dedication to training, as well as proper eating habits. Train each muscle group to failure before moving on to the next exercise. Do not neglect any muscle group. If needed, include an aerobic activity to increase your caloric expenditure and help to reduce your body fat levels to achieve a defined muscular look. Rest 30-60 seconds between each set and exercise. Focus on proper form. *Tighten* the muscle before you move, *squeeze* the muscle as you move, *cramp* the muscle at the point of full contraction, and *resist* the movement as you lower the weight. Move slowly on each rep. Use a pace that would allow you to stop the movement instantly at any point in the rep. Count three seconds up and three seconds down and work to fatigue during each set.

DAY 1

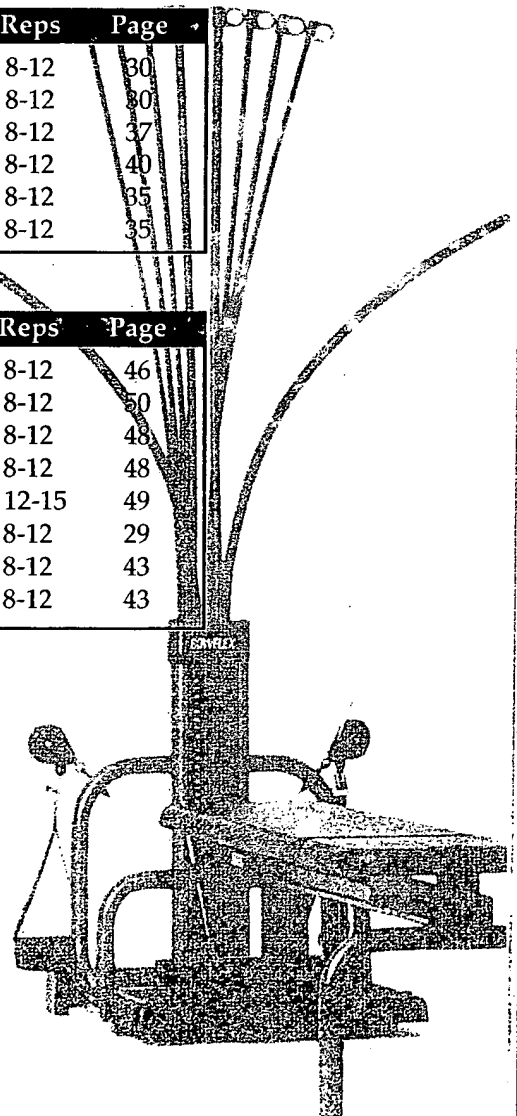
Body Part	Exercise	Sets	Reps	Page
Chest	Bench Press	2-4	8-12	18
	One Arm Seated Fly	2-4	8-12	18
Shoulders	Seated Shoulder Press	2-4	8-12	21
	Rear Deltoid Row	2-4	8-12	22
	Lateral Shoulder Raise	2-4	8-12	22
	Shoulder Shrug	2-4	8-12	25

DAY 2

Body Part	Exercise	Sets	Reps	Page
Back	Seated Lat Rows	2-4	8-12	30
	Lying Lat Pulldowns	2-4	8-12	30
Arms	Standing Biceps Curl	2-4	8-12	37
	Reverse Curl	2-4	8-12	40
	Lying Triceps Extension	2-4	8-12	35
	French Press	2-4	8-12	35

DAY 3

Body Part	Exercise	Sets	Reps	Page
Legs	Leg Press	2-4	8-12	46
	Lying Leg Extension	2-4	8-12	50
	Standing Hip Extension	2-4	8-12	48
	Seated Leg Curl	1-3	8-12	48
	Seated (straight leg) Calf Raise	2-4	12-15	49
Trunk	Functional Low Back Extension	2-4	8-12	29
	Seated (resisted) Abdominal Crunch	2-4	8-12	43
	Seated (resisted) Oblique Crunch	2-4	8-12	43



The Workouts

CIRCUIT TRAINING - ANAEROBIC/CARDIOVASCULAR

FREQUENCY: 2-3 TIMES PER WEEK TIME: ABOUT 20-45 MINUTES

Circuit training is a great way to achieve the benefits of strength training *and* cardiovascular training in one quick, challenging routine. The idea is to move quickly from exercise to exercise, taking only as much rest between sets as it takes to set up the next exercise (less than 20 seconds). One circuit equals one set of each exercise. Initially, start with completing one round of Circuit 1. Then add an additional round of the same circuit. Once you reach three rounds of Circuit 1, add one round of Circuit 2. Add additional rounds of Circuit 2 as your fitness level increases. Repeat process with Circuit 3. Do not let your heart rate exceed 220 minus your resting heart rate. Perform each rep of each exercise slowly and with perfect technique. Count three seconds up and three seconds down. *Warm-up* with 5-15 minutes of rowing or some other aerobic exercise before starting your circuits.

Circuit 1

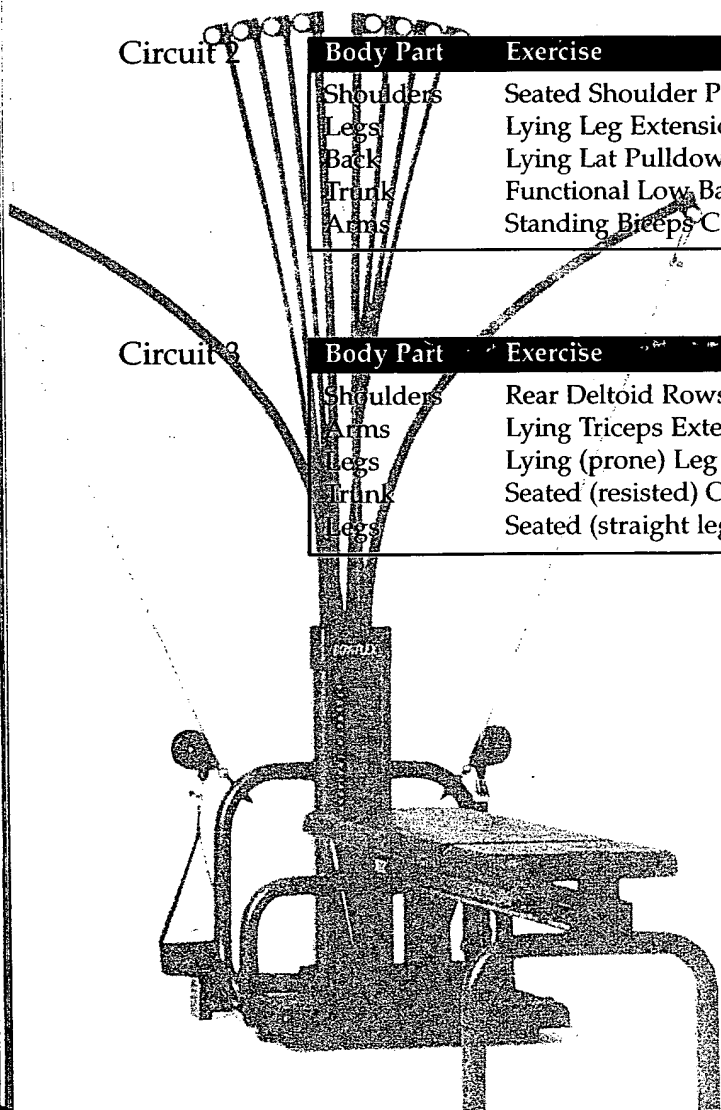
Body Part	Exercise	Reps	Page
Chest	Bench Press	8-12	18
Legs	Leg Press	8-12	46
Back	Seated Lat Row	8-12	30
Legs	Seated Leg Curl	8-12	48
Trunk	Seated (resisted) Abdominal Crunch	8-12	43

Circuit 2

Body Part	Exercise	Reps	Page
Shoulders	Seated Shoulder Press	8-12	21
Legs	Lying Leg Extension	8-12	50
Back	Lying Lat Pulldowns	8-12	30
Trunk	Functional Low Back Extension	8-12	29
Arms	Standing Biceps Curl	8-12	37

Circuit 3

Body Part	Exercise	Reps	Page
Shoulders	Rear Deltoid Rows	8-12	22
Arms	Lying Triceps Extension	8-12	35
Legs	Lying (prone) Leg Curl	8-12	46
Trunk	Seated (resisted) Oblique Crunch	8-12	43
Legs	Seated (straight leg) Calf Raise	8-12	49



TRUE AEROBIC CIRCUIT TRAINING

FREQUENCY: 2-3 TIMES PER WEEK TIME: ABOUT 20-60 MINUTES

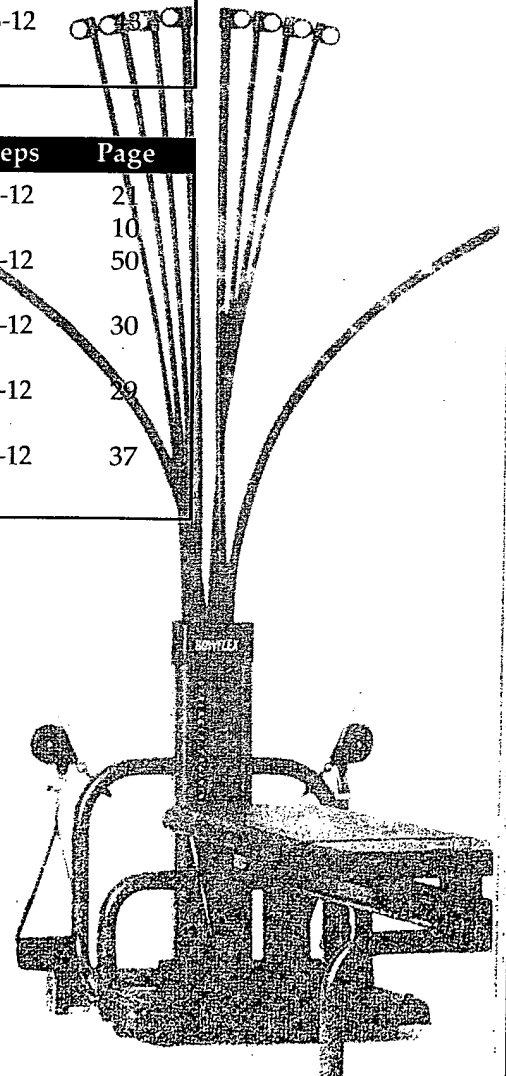
Circuit training is a great way to achieve the benefits of strength training *and* cardiovascular training in one quick, challenging routine. By returning to the aerobic rowing exercise between each set you are increasing your aerobic capacity, endurance and burning fat as energy. The idea is to move quickly from exercise to exercise, taking only as much rest between sets as it takes to set up the next exercise (less than 20 seconds). One circuit equals one set of each exercise. Initially, start with completing one round of Circuit 1. Then add an additional round of the same circuit. Once you reach three rounds of Circuit 1, add one round of Circuit 2. Add additional rounds of Circuit 2 as your fitness level increases. Repeat process with Circuit 3. Do not let your heart rate exceed 220 minus your resting heart rate. Perform each rep of each exercise slowly and with perfect technique. Count three seconds up and three seconds down. *Warm-up* with 5-15 minutes of rowing or some other aerobic exercise before starting your circuits.

Circuit 1

Body Part	Exercise	Reps	Page
Chest	Bench Press	8-12	18
Aerobic Rowing	30 - 60 Seconds		10
Legs	Leg Press	8-12	46
Aerobic Rowing	30 - 60 Seconds		
Back	Seated Lat Rows	8-12	30
Aerobic Rowing	30 - 60 Seconds		
Legs	Seated Leg Curl	8-12	48
Aerobic Rowing	30 - 60 Seconds		
Trunk	Seated (resisted) Abdominal Crunch	8-12	18
Aerobic Rowing	30 - 60 Seconds		

Circuit 2

Body Part	Exercise	Reps	Page
Shoulders	Seated Shoulder Press	8-12	21
Aerobic Rowing	30 - 60 Seconds		10
Legs	Lying Leg Extension	8-12	50
Aerobic Rowing	30 - 60 Seconds		
Back	Lying Lat Pulldowns	8-12	30
Aerobic Rowing	30 - 60 Seconds		
Trunk	Functional Low Back Extension	8-12	29
Aerobic Rowing	30 - 60 Seconds		
Arms	Standing Biceps Curl	8-12	37



The Workouts

STRENGTH TRAINING

FREQUENCY: 3 DAYS PER WEEK (M-W-F) TIME: ABOUT 45-60 MINUTES

This program is designed to emphasize overall strength development. This is an advanced routine to be used only after you have progressed from the advanced general conditioning routine and only after you have perfected your exercise techniques. Work each set to near exhaustion. If you can perform more than 5 to 8 reps, you should increase your resistance 5 lbs. and decrease your reps to 5. Rest 60 - 120 seconds between each set and exercise. Focus on proper form. *Tighten* the muscle before you move, *squeeze* the muscle as you move, *cramp* the muscle at the point of full contraction, and *resist* the movement as you lower the weight. Move slowly on each rep. Use a pace that would allow you to stop the movement instantly at any point in the rep. Count two seconds up and four seconds down and work to fatigue during each set.

Day 1

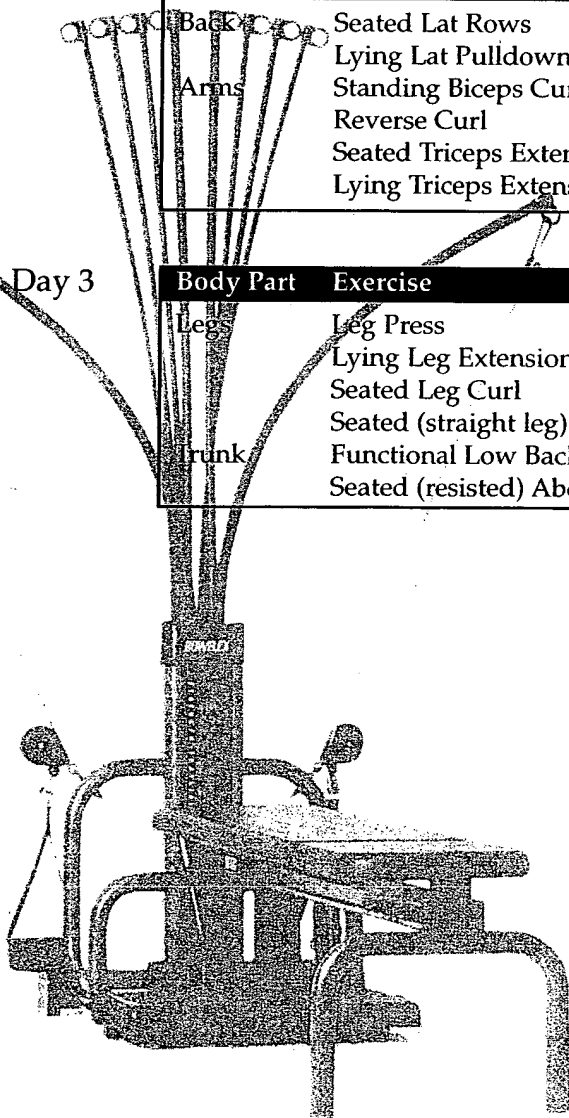
Body Part	Exercise	Sets	Reps	Page
Chest	Bench Press	2-4	5-8	18
	One Arm Seated Fly	2-4	5-8	18
Shoulders	Seated Shoulder Press	2-4	5-8	21
	Rear Deltoid Rows	2-4	5-8	22
	Shoulder Shrug	2-4	5-8	25

Day 2

Body Part	Exercise	Sets	Reps	Page
Back	Seated Lat Rows	2-4	5-8	30
	Lying Lat Pulldowns	2-4	5-8	30
Arms	Standing Biceps Curl	2-4	5-8	37
	Reverse Curl	2-4	5-8	40
	Seated Triceps Extension	2-4	5-8	37
	Lying Triceps Extension	2-4	5-8	35

Day 3

Body Part	Exercise	Sets	Reps	Page
Legs	Leg Press	2-4	5-8	46
	Lying Leg Extension	2-4	5-8	50
	Seated Leg Curl	2-4	5-8	48
	Seated (straight leg) Calf Raise	2-4	5-8	49
Trunk	Functional Low Back Extension	2-4	8-12	29
	Seated (resisted) Abdominal Crunch	2-4	5-8	43



INCLINE BENCH PRESS - Shoulder Horizontal Adduction (and elbow extension)

Muscles worked: This exercise emphasizes the chest muscles (pectoralis major), especially the upper portion. It also involves the front shoulder muscles (anterior deltoid, a portion of the middle deltoid) and the triceps, which are located on the back of the upper arm. NOTE: This motion can be further emphasized by using the Purvis Pec Bar attachment.

Starting position:

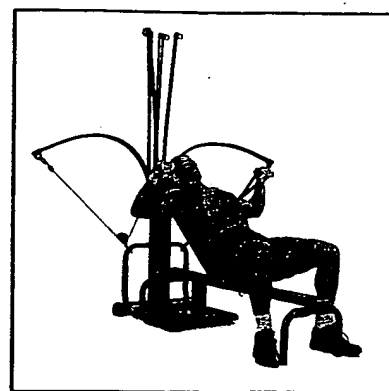
- Seated in the 45 degree position, reach straight behind your body, grasp the handles, and bend your elbows until your hands are near your chest and your palms are facing towards the floor.
- Keeping knees bent and feet flat on the floor, lay your head back against the bench and straighten your arms to the front.
- From this position, raise your arms 10-15 degrees (6-8 inches) above the regular bench press position.
- Be sure that your arms are directly "in line" with the cables, palms facing down and wrists straight. If the cables are "above" the arms, too much elevation was introduced.
- Raise your chest and "pinch" your shoulder blades together. Maintain a very slight, comfortable, arch in your lower back.

Motion:

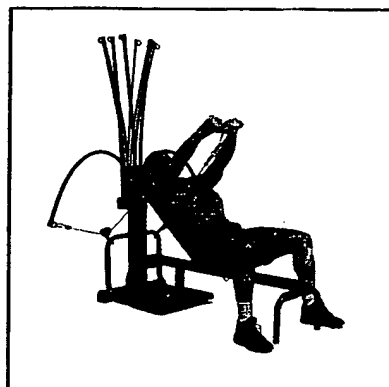
- Slowly move your elbows outward, simultaneously bending your arms, keeping the forearms in line with the cables at all times.
- Stop when your upper arms are straight out to the sides, 10 degrees above your shoulders.
- Then, slowly press forward, moving the hands toward the center, and return to the starting position with arms straight to the front at shoulder width and in line with the cables. Keep your chest muscles tightened during the entire motion.

Key points:

- The upper arms will be 90 degrees from the sides of your torso at the bottom of the movement and slightly more than 90 degrees from the front of your torso at the top.
- Limit and control the range of motion so that your elbows do not travel behind your shoulders.
- Keep shoulder blades "pinched" together and maintain good spinal alignment.



START



FINISH

CHEST FLY - Shoulder Horizontal Adduction (elbow stabilized)

Muscles worked: This exercise emphasizes the chest muscles (pectoralis major), also involving the front shoulder muscles (anterior deltoid).

Starting position:

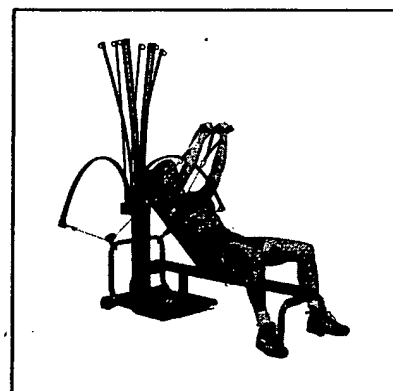
- Seated in the 45 degree position, reach straight behind your body, grasp the handles, and bend your elbows until your hands are near your chest and your palms are facing towards the floor.
- Keeping knees bent and feet flat on the floor, lay your head back against the bench and straighten your arms to the front.
- Be sure that your arms are directly "in line" with the cables, palms facing down and wrists straight.
- Raise your chest and "pinch" your shoulder blades together. Maintain a very slight, comfortable, arch in your lower back.

Motion:

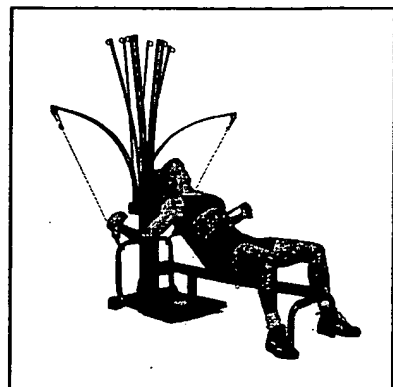
- Slowly move your arms outward, maintaining the elbow in a slightly bent position throughout the movement.
- Stop when your upper arms are straight out to the sides, level with the shoulders.
- Slowly return to starting position keeping your chest muscles tightened during the entire motion.

Key points:

- Maintain a 90 degree angle between the upper arms and the torso throughout the exercise.
- Limit and control the range of motion so that your elbows do not travel behind your shoulders.
- Keep shoulder blades "pinched" together and maintain good spinal alignment.

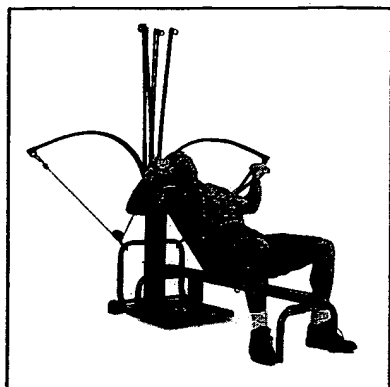


START

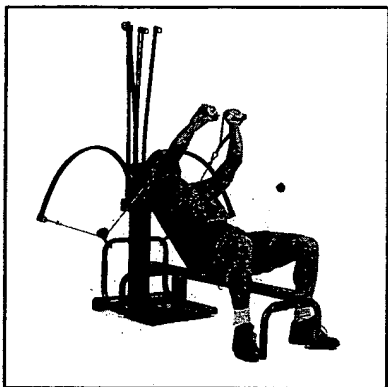


FINISH

Chest Exercises



START



FINISH

BENCH PRESS - Shoulder Horizontal Adduction (and elbow extension)

Muscles worked: This exercise emphasizes the chest muscles (pectoralis major), also involving the front shoulder muscles (anterior deltoid, a portion of the middle deltoid) and the triceps, which are located on the back of the upper arm. NOTE: This motion can be further emphasized by using the Purvis Pec Bar attachment.

Starting Position:

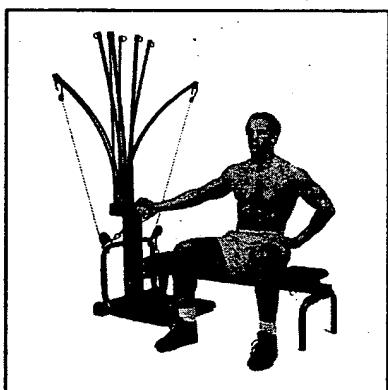
- Seated in the 45 degree position, reach straight behind your body, grasp the handles, and bend your elbows until your hands are near your chest and your palms are facing towards the floor.
- Keeping knees bent and feet flat on the floor, lay your head back against the bench and straighten your arms to the front.
- Be sure that your arms are directly "in line" with the cables, palms facing down and wrists straight.
- Raise your chest and "pinch" your shoulder blades together. Maintain a very slight, comfortable, arch in your lower back.

Motion:

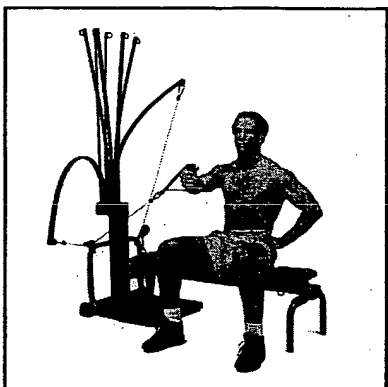
- Slowly move your elbows outward, simultaneously bending your arms, keeping the forearms in line with the cables at all times.
- Stop when your upper arms are straight out to the sides, level with your shoulders.
- Then, slowly press forward, moving the hands toward the center, and return to the starting position with arms straight to the front at shoulder width and in line with the cables. Keep your chest muscles tightened during the entire motion.

Key points:

- Maintain a 90 degree angle between the upper arms and the torso throughout the exercise.
- Limit and control the range of motion so that your elbows do not travel behind your shoulders.
- Keep shoulder blades "pinched" together and maintain good spinal alignment.



START



FINISH

ONE ARM SEATED FLY - Horizontal Adduction (elbow stabilized)

Muscles worked: This exercise emphasizes the chest muscles (pectoralis major), also involving the front shoulder muscles (anterior deltoid).

Starting position:

- Sit on the bench with one side toward the power rods. Maintain good spinal alignment.
- Grasp the handle nearest you.
- Distance yourself on the bench to eliminate slack in the cable while the arm is straight out to the side, slight bend in the elbow.
- Pinch your shoulder blades together and hold.

Action:

- Slowly draw your arm toward the front maintaining the elbow and shoulder blade positions.
- Stop when the arm is directly in front of the shoulder.
- Slowly return to the starting position without relaxing and keeping the arm approximately 90 degrees from the trunk.

Key points:

- Control the motion during the entire exercise. DO NOT USE MOMENTUM.
- Do not rotate the spine to get additional range of motion.
- Stop when the arm is directly in front or directly out to the side.

RESISTED PUNCH - Shoulder Flexion, Elbow Extension, and Scapular Protraction

Muscles worked: This exercise involves the entire chest muscle, the front shoulder muscles (anterior deltoid, a portion of the middle deltoid) and the triceps, which are located on the back of the upper arm. The goal however, is not any specific muscle group. It is to be used with very light resistance for an endurance activity.

Starting position:

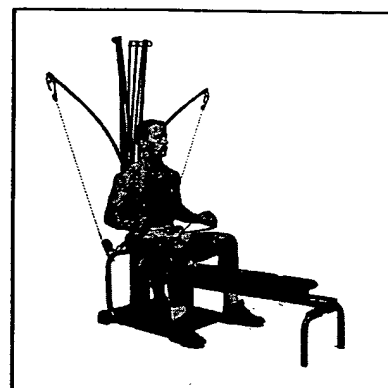
- Seated in the flat position, reach straight behind your body, grasp the handles, bend your elbows until your hands are near your chest and your palms are facing towards the floor.
- Keeping knees bent and feet flat on the floor, lay your head back against the bench. Keep your arms bent.

Motion:

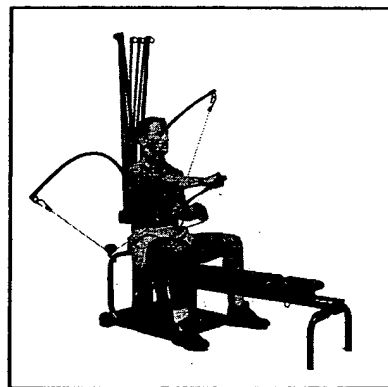
- Using a moderate speed and light weight, press one arm forward to full extension, allowing the shoulder blade to move forward at the end of the punch.
- Return that arm to the starting position under control and repeat with the other arm.

Key points:

- This is unlike other chest exercises.
- It is important to note that "sport specific" movements will not necessarily improve the skill associated with a sport.



START



FINISH

BENCH PRESS with Purvis Pec bar - Shoulder Horizontal Adduction (and elbow extension)

Muscles worked: This exercise emphasizes the chest muscles (pectoralis major), also involving the front shoulder muscles (anterior deltoid, a portion of the middle deltoid) and the triceps, which are located on the back of the upper arm.

Starting position:

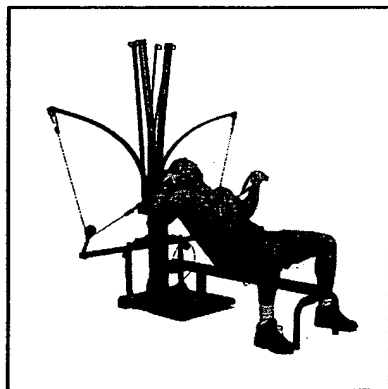
- Seated in the 45 degree position, reach straight behind your body, grasp the handgrips, and bend your elbows until your hands are near your chest and your palms are facing towards the floor.
- Keeping knees bent and feet flat on the floor, lay your head back against the bench and straighten your arms to the front.
- Be sure that your arms are directly "in line" with the cables, palms facing down and wrists straight.
- Raise your chest and "pinch" your shoulder blades together. Maintain a very slight, comfortable, arch in your lower back.

Motion:

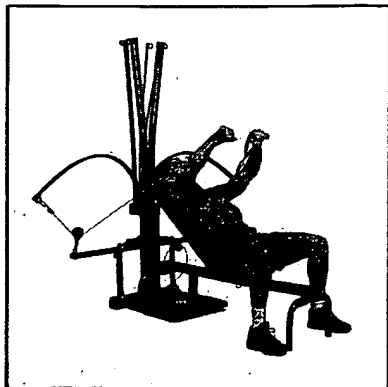
- Slowly move your elbows outward, simultaneously bending your arms, keeping the forearms in line with the cables at all times.
- Stop when your upper arms are straight out to the sides, level with your shoulders.
- Then, slowly press forward, moving the hands toward the center, and return to the starting position with arms straight to the front at shoulder width and in line with the cables. Keep your chest muscles tightened during the entire motion.

Key points:

- Maintain a 90 degree angle between the upper arms and the torso throughout the exercise.
- Limit and control the range of motion so that your elbows do not travel behind your shoulders.
- Keep shoulder blades "pinched" together and maintain good spinal alignment.



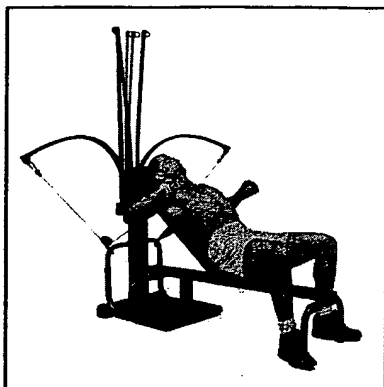
START



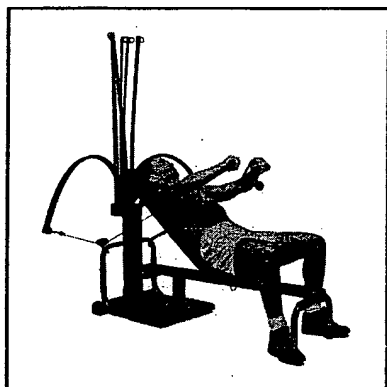
FINISH

Chest Exercises

DECLINE BENCH PRESS - Shoulder Horizontal Adduction (and elbow extension)



START



FINISH

Muscles worked: This exercise emphasizes the chest muscles (pectoralis major), especially the lower portion. It also involves the front shoulder muscles (anterior deltoid, a portion of the middle deltoid) and the triceps, which are located on the back of the upper arm. **NOTE:** This motion can be further emphasized by using the Purvis Pec Bar attachment.

Starting position:

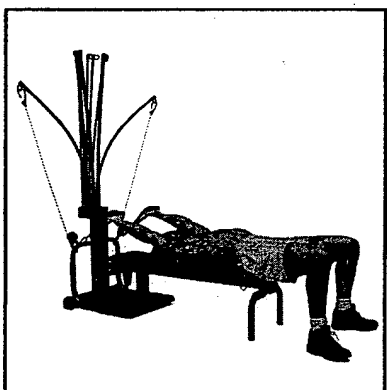
- Seated in the 45 degree position, reach straight behind your body, grasp the handles with an over hand grip, then bend your elbows until your hands are near your chest and your palms are facing towards the floor.
- Make sure cables travel underneath your arms, not over your arms.
- Keeping knees bent and feet flat on the floor, lay your head back against the bench and straighten your arms to the front.
- Be sure that your arms are directly "in line" with the cables, palms facing down and wrists straight.
- Raise your chest and "pinch" your shoulder blades together. Maintain a very slight, comfortable, arch in your lower back.
- Lower arms 10 degrees (5-6 inches) from than the standard bench press position.

Motion:

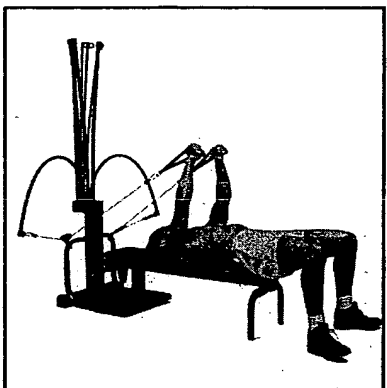
- Slowly move your elbows outward, simultaneously bending your arms, keeping the forearms in line with the cables at all times.
- Stop when your upper arms are straight out to the sides, 10 degrees below your shoulders.
- Then, slowly press forward, moving the hands toward the center, and return to the starting position with arms straight to the front at shoulder width and in line with the cables. Keep your chest muscles tightened during the entire motion.

Key points:

- Maintain a 90 degree angle between the upper arms and the torso at the bottom of the motion and slightly less than 90 degrees at the top of the motion.
- Limit and control the range of motion so that your elbows do not travel behind your shoulders.
- Keep shoulder blades "pinched" together and maintain good spinal alignment.



START



FINISH

LYING SHOULDER PULLOVER - Shoulder Extension (elbow stabilized)

Muscles worked: This exercise emphasizes the upper back (the latissimus dorsi, teres major, and rear deltoid muscles). It also involves the chest (the pectoralis major muscles). The triceps muscles, located on the back of the upper arms, are involved in maintaining the elbow position and also help with shoulder motion.

Starting position:

- With the bench flat, lie on your back with your head towards the power rods. Position yourself far enough down the bench to allow the arms to extend overhead without hitting the power rods. Keep the knees bent and feet flat on the floor.
- Extend the arms overhead and grasp the handles with your palms facing the ceiling.
- Tighten your abdominals to stabilize your spine while maintaining a very slight arch in the lower back.

Action:

- Move your hands in an arc upward and then down towards your legs.
- Keep your shoulder blades on the bench and slide them toward your hips as you move your arms.
- Control the return to the starting position by slowly moving the arms back overhead and releasing the shoulder blades.

Key points:

- Do not lose spinal alignment. Relax your neck, keep your chest lifted, abs tight and maintain a very slight arch in your lower back.
- Keep the lats tightened throughout the entire motion.
- Release your shoulder blades at the end of each rep and initiate each new rep by depressing your shoulder blades.

SEATED SHOULDER PRESS - Shoulder Abduction (and elbow extension)

Muscles worked: This exercise emphasizes the front portion of the shoulder muscles (front deltoids as well as the front part of the middle deltoids), the upper back muscles (upper trapezius), and the triceps muscles located on the backs of the upper arms. NOTE: This motion can be further emphasized by using the Purvis Pec Bar attachment.

Starting position:

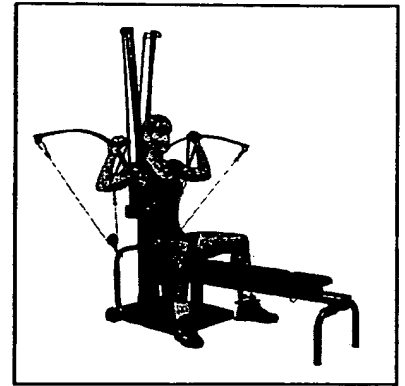
- Sit on the bench facing away from the power rods, knees bent and feet flat on the floor.
- You may wish to sit against the vertical rod holder or be free from support, increasing the challenge of spinal stabilization as part of the exercise.
- Keep your chest up, abdominals tight and maintain a very slight arch in your lower back.
- Grasp handles with palms facing away from the machine.
- Raise handles to just above shoulder level, keeping palms facing forward.

Action:

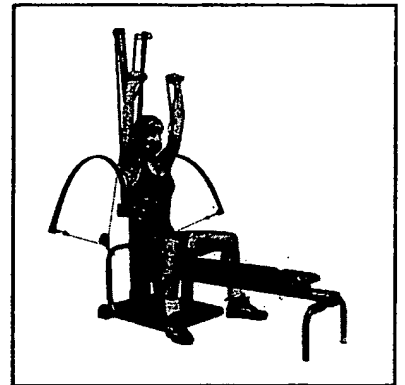
- Straighten arms overhead, focusing on moving your elbows up and inward toward your head.
- Slowly return to starting position keeping tension in the front shoulder muscles.

Key points:

- Keep the abdominals tight throughout the entire motion and maintain good spinal alignment.
- Do not let the arch increase in the lower back while pressing up.



START



FINISH

FRONT SHOULDER RAISE - Shoulder Flexion (elbow stabilized)

Muscles worked: This exercise emphasizes the front portion of the shoulder muscles (front deltoids as well as the front part of the middle deltoids).

Starting position:

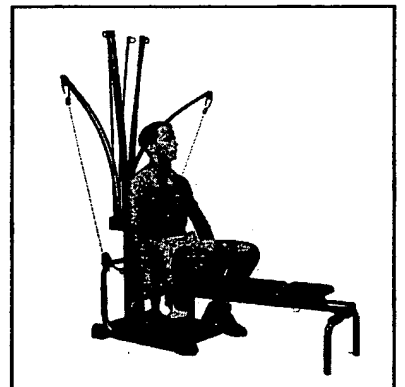
- Sit on the bench facing away from the power rods, knees bent and feet flat on the floor.
- You may wish to sit against the vertical rod holder or be free from support, increasing the challenge of spinal stabilization as part of the exercise.
- Keep your chest up, abdominals tight and maintain a slight arch in your lower back.
- Grasp handles with your palms facing towards the machine and arms straight at your sides.

Action:

- The arms may be moved alternately, or together.
- Keeping your arms straight, move them forward then upward to shoulder height.
- Slowly return the arms beside the torso and repeat.

Key points:

- Keep the chest lifted and the abdominals tightened throughout the entire motion and maintain good spinal alignment.
- Do not increase the arch in your lower back while lifting your arms.

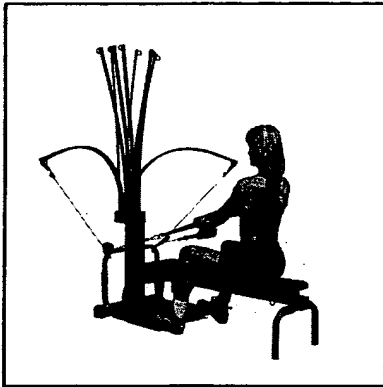


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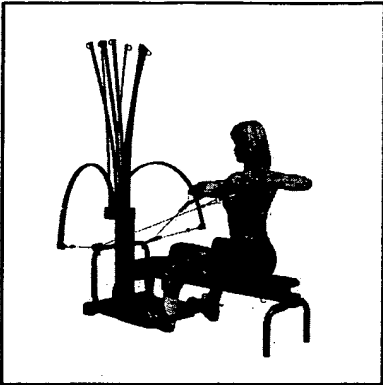


FINISH

Shoulder Exercises



START



FINISH

REAR DELTOID ROWS - Shoulder Horizontal Abduction (and elbow flexion)

Muscles worked: This exercise emphasizes the back portion of the shoulder muscles (the rear deltoids, as well as the rear portion of the middle deltoids).

Starting position:

- Sit on the bench facing the power rods, knees bent and your feet on the platform.
- Cross the handles and grasp with your palms facing down and arms straight (right hand on left handle and vice versa).
- Sit up straight and then bend over slightly from the hips (not the spine) until arms are in front of body at a 90 degree angle to your torso.
- Lift your chest and pinch your shoulder blades together.

Action:

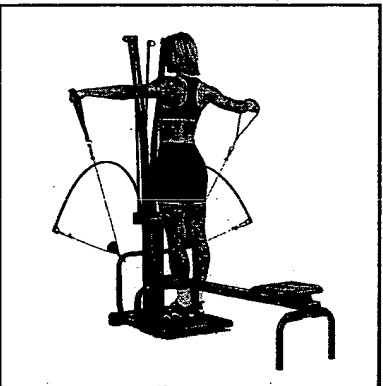
- Allowing your arms to bend as you go, move your elbows outward and backwards keeping a 90 degree angle between your upper arms and the sides of your torso.
- Your forearms always point in the direction of the cables.
- Move until your elbows are slightly behind your shoulders, then slowly reverse the motion keeping the rear shoulder muscles tightened during the entire motion.

Key points:

- Maintain a 90 degree angle between your upper arms and the sides of your torso during the exercise.
- Keep shoulder blades "pinched" together and maintain good spinal alignment during the entire exercise.
- To work one arm at a time, place non-working hand on top of the bench for additional stabilization.



START



FINISH

LATERAL SHOULDER RAISE - Shoulder Abduction (elbow stabilized)

Muscles worked - This exercise emphasizes the side shoulder muscles (middle deltoids), the top muscle of the rotator cuff (supraspinatus) and the upper trapezius muscles.

Starting position:

- Remove the bench and stand on the platform straddling the rail and facing the power rods.
- Grasp the handles with palms facing towards each other.
- Attain good spinal posture and bend forward slightly at the hip (15 to 20 degrees) by keeping your spine straight and sticking your rear end out. Do not bend at your waist.
- Let your arms hang directly in line with the cables.
- Elevate your shoulders very slightly toward the back of your head.

Action:

- Raise your arms directly out to the sides to almost shoulder level.
- Keep the side of your arm/elbow facing out/up throughout the movement.
- Slowly bring your arms into the starting position without relaxing.

Key points:

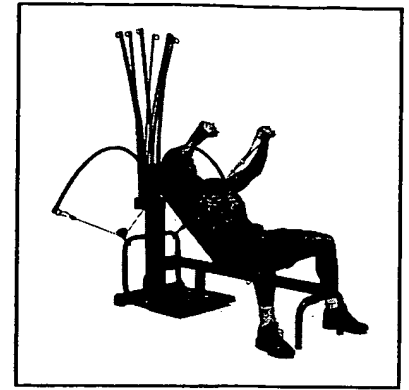
- DO NOT swing the arms upward or move the trunk during the motion.

SCAPULAR PROTRACTION (elbow stabilized)

Muscles worked: This exercise emphasizes the serratus anterior muscles, the muscles that can be seen on the side of the rib cage, and are involved in pushing movements when the arms are kept straight and the scapula are allowed to move forward.

Starting position:

- Seated in the 45 degree position, reach straight behind your body, grasp the handles, and bend your elbows until your hands are near your chest and your palms are facing towards the floor.
- Keeping knees bent and feet flat on the floor, lay your head back against the bench and straighten your arms to the front.
- Be sure that your arms are directly "in line" with the cables, palms facing down and wrists straight.
- Raise your chest and "pinch" your shoulder blades together. Maintain a very slight, comfortable, arch in your lower back.



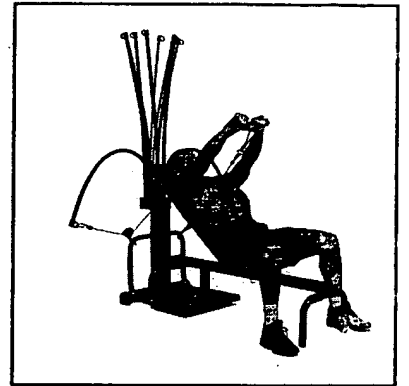
START

Action:

- Keeping your arms straight and pointing the same direction of the cables, slowly move your shoulder blades forward off of the bench, as if shoving your arms straight ahead.
- Slowly return to the starting position.

Key points:

- Maintain a 90 degree angle between upper arms and your torso throughout the exercise.
- Keep your elbows straight.
- Do not slouch forward in the upper spine to further the motion. Maintain a very slight arch in your lower back at all times.



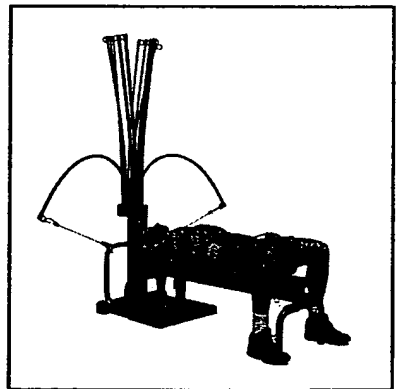
FINISH

SCAPULAR DEPRESSION

Muscles worked: This exercise develops your lower trapezius muscles, which are stabilizing and moving your shoulder blades. This motion of scapula depression is very important in posture as well as when using the arms to raise from a chair, and it is also involved in overhead pulling exercises.

Starting position:

- With the bench flat, lie on your back with your head towards the power rods, knees bent, and feet flat on the floor.
- Grasp the handles and bring your arms along side your trunk.
- Tighten your trunk muscles to stabilize your spine while maintaining a very slight arch in the lower back.



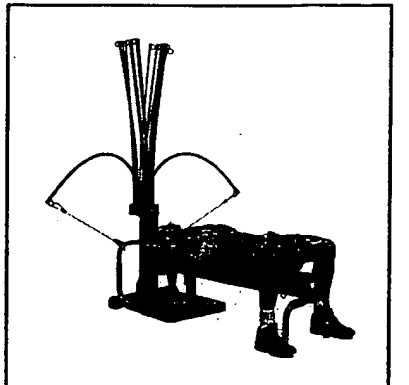
START

Action:

- Keeping the arms straight, slide your shoulder blades towards your hips.
- When shoulder blades are fully depressed, slowly return to the starting position.

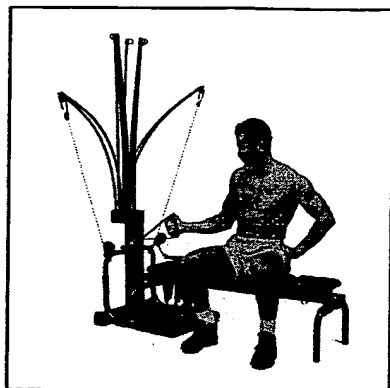
Key points:

- Do not lose spinal alignment, keep your chest lifted.

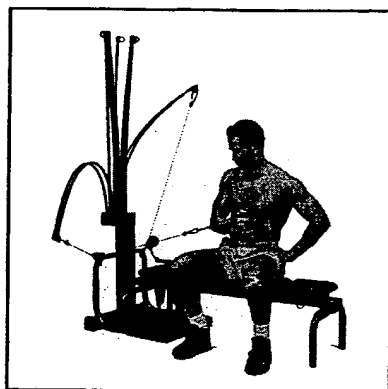


FINISH

Shoulder Exercises



START



FINISH

SHOULDER ROTATOR CUFF - Internal Rotation

Muscles worked: This exercise emphasizes the front rotator cuff muscle (subscapularis).

Starting position:

- Sit on the bench with one side towards the power rods. Maintain good spinal alignment.
- Grasp the handle nearest you and draw the upper arm into your side, keeping your elbow bent.
- Distance yourself on the bench to eliminate slack in the cable.
- Use a very light resistance. This is not a powerful movement.

Action:

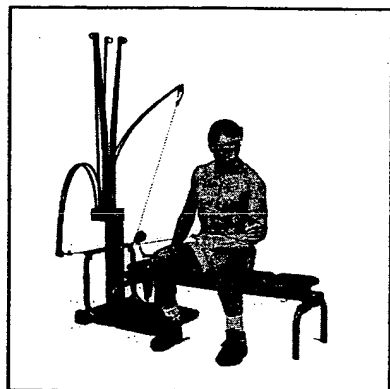
- Rotate your forearm towards your abdomen, keeping your elbow by your side during the entire motion.
- Slowly return to the starting position.

Key points:

- Control the motion during the entire exercise. **DO NOT USE MOMENTUM.**
- Do not rotate the spine to get additional range of motion. Try for "pure" rotation of the shoulder joint. More is not better!
- Use light resistance only. Pick a resistance that you can perform 12 - 15 perfect reps.



START



FINISH

SHOULDER ROTATOR CUFF- External Rotation

Muscles worked: This exercise emphasizes the rear portion of the rotator cuff (infraspinatus and teres minor muscles). This area generally gets very weak as we age and needs to be addressed by almost everyone.

Starting position:

- Sit on the bench with one side towards the power rods. Maintain good spinal alignment.
- Using the arm furthest from the rods, reach across your body, grasp the handle nearest you and draw that arm back into your side, keeping your elbow bent.
- Allow your forearm to rest against your abdomen and your elbow against your side, taking out some of the slack or tension in the cables.

Action:

- Rotate your forearm away from your abdomen and out to the side, keeping your elbow/upper arm by your side during the entire motion.
- Slowly return to the starting position.

Key points:

- Control the motion during the entire exercise. **DO NOT USE MOMENTUM.**
- Do not rotate the spine to get additional range of motion. Try for "pure" external rotation of the shoulder joint. More is not better!
- Use light resistance only. Pick a resistance that allows you to perform 12 - 15 reps.

Shoulder Exercises

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SHOULDER EXTENSION - (elbows stabilized)

Muscles worked: This exercise emphasizes your upper back (the latissimus dorsi, teres major and rear deltoid muscles), as well as the muscles between your shoulder blades (middle trapezius and rhomboid muscles). The triceps muscles, located on the back of the upper arms, are worked throughout the entire motion as they try to prevent the elbows from bending.

Starting position:

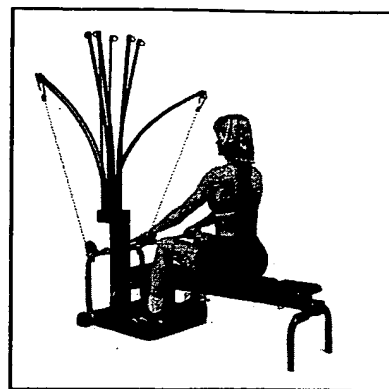
- With the bench flat, sit facing the power rods, knees bent, and feet flat on the floor.
- Grasp the handles with your palms facing towards the floor.
- Tighten your trunk muscles to stabilize your spine while maintaining a very slight arch in the lower back.

Action:

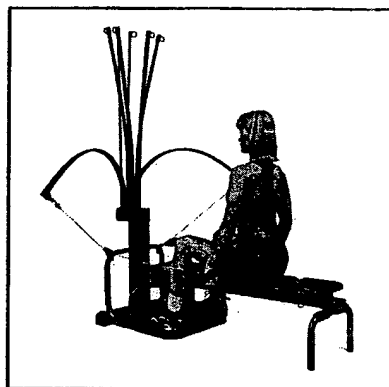
- Initiate the movement by "pinching" your shoulder blades together.
- Continue the movement by moving your hands in an arc downward and backward towards your hips.
- Slowly return to the starting position.

Key points:

- Do not lose spinal alignment - keep chest lifted.
- Keep the lats tightened throughout the entire motion.
- Release your shoulder blades at the end of each rep and initiate each new rep by retracting your shoulder blades.



START



FINISH

SHOULDER SHRUG - Scapular Elevation

Muscles worked: The primary muscles emphasized are the upper trapezius and associated smaller muscles of the region.

Starting position:

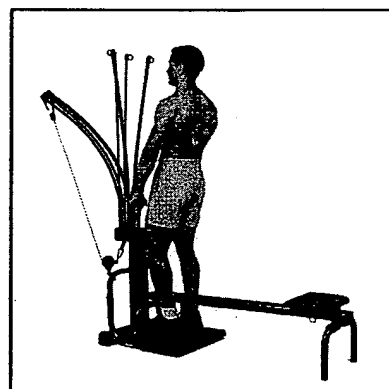
- Stand on the platform facing the power rods. Reach down and grasp the handles with the palms facing each other or facing backward, whichever is more comfortable.
- Let your arms hang extending in the direction of the pulleys.

Action:

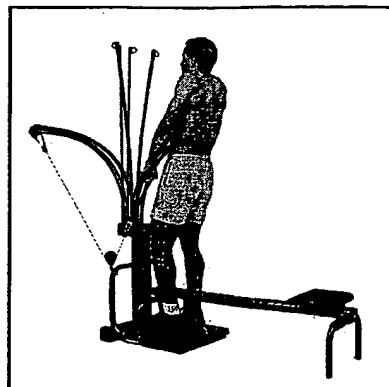
- Raise your shoulders towards the back of your head, making sure your neck/head position does not move.
- Slowly reverse the motion, keeping the upper trapezius muscles tight during the entire motion.

Key points:

- Do not bend the neck backwards or forwards while raising the shoulders.
- Do not slouch upon lowering the shoulders
- Keep the spine in good alignment throughout the entire motion.
- Make sure both shoulders raise evenly.
- For a variation, bend forward slightly from the hips, not the spine.

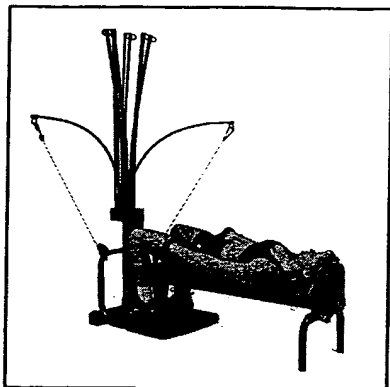


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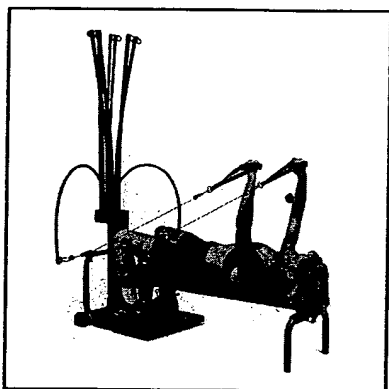


FINISH

Shoulder Exercises



START



FINISH

LYING FRONT SHOULDER RAISE - Shoulder Flexion (elbow stabilized)

Muscles worked: This exercise emphasizes the front portion of the shoulder muscles (front deltoids as well as the front part of the middle deltoids).

Starting position:

- Sit on the bench facing the power rods, knees bent and feet flat on the platform.
- Grasp the handles, with your arms straight and your palms facing down. Lie back completely so that your head is supported by the bench.
- Keep your chest up, abdominals tight and maintain a slight arch in your lower back.

Action:

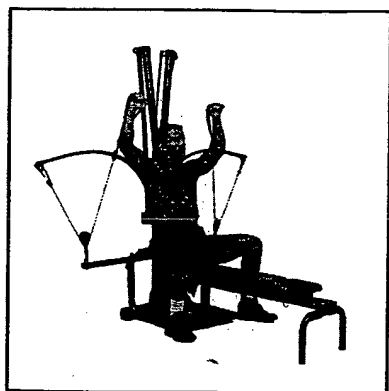
- You may move your arms alternately or together.
- Keeping them straight, move your arms in an arc upwards and then directly over your shoulders.
- Slowly return to the starting position, arms by your sides.

Key points:

- Keep the chest lifted and the abdominals tightened throughout the entire motion. Maintain good spinal alignment.
- Do not increase the arch in your lower back while lifting your arms.



START



FINISH

SEATED SHOULDER PRESS with Purvis Pec Bar - Shoulder Abduction (and elbow extension)

Muscles worked: This exercise emphasizes the front portion of the shoulder muscles (front deltoids as well as the front part of the middle deltoids), the upper back muscles (upper trapezius), and the triceps muscles located on the backs of the upper arms.

Starting position:

- Sit on the bench facing away from the power rods, knees bent and feet flat on the floor.
- You may wish to sit against the vertical rod holder or be free from support, increasing the challenge of spinal stabilization as part of the exercise.
- Keep your chest up, abdominals tight and maintain a very slight arch in your lower back.
- Grasp handles with palms facing away from the machine.
- Raise handles to just above shoulder level, keeping palms facing forward.

Action:

- Straighten arms overhead, focusing on moving your elbows up and inward towards your head.
- Slowly return to starting position keeping tension in the front shoulder muscles.

Key points:

- Keep the abdominals tight throughout the entire motion and maintain good spinal alignment.
- Do not let the arch increase in the lower back while pressing up.

REVERSE FLY - Shoulder Horizontal Abduction (elbows stabilized)

Muscles worked: This exercise emphasizes the back portion of the shoulder muscles (the rear deltoids, as well as the rear portion of the middle deltoids.)

Starting position:

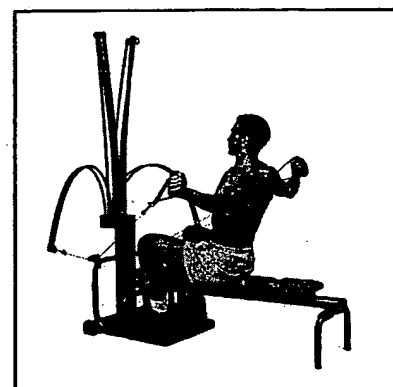
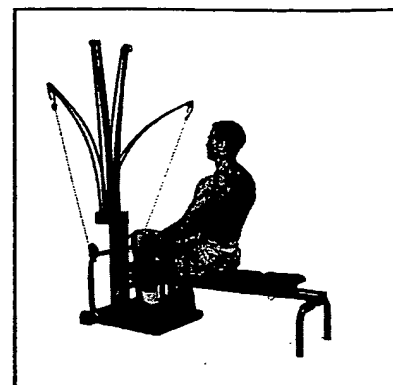
- With the bench flat, sit facing the power rods, knees bent, and feet flat on the floor.
- Grasp the handles with your palms facing towards the floor and arms nearly straight.
- Sit up straight and then bend over slightly from the hips (not the spine) until arms are in front of body at a 90 degree angle to your torso.
- Lift chest and pinch shoulder blades together.

Action:

- Maintaining the same slight bend in your arms, move your elbows outward and backwards, keeping a 90 degree angle between your upper arms and the sides of your torso.
- Move until your elbows are slightly behind your shoulders, then slowly reverse the motion keeping the rear shoulder muscles tightened during the entire motion.

Key points:

- Maintain a 90 degree angle between your upper arms and the sides of your torso during the exercise.
- Keep shoulder blades "pinched" together and maintain good spinal alignment during the exercise.
- To work one arm at a time, place non-working hand on top of the bench for additional stabilization.



REVERSE SHOULDER SHRUG - Scapular Elevation

Muscles worked: The primary muscles emphasized are the upper trapezius and associated smaller muscles of the region.

Starting position:

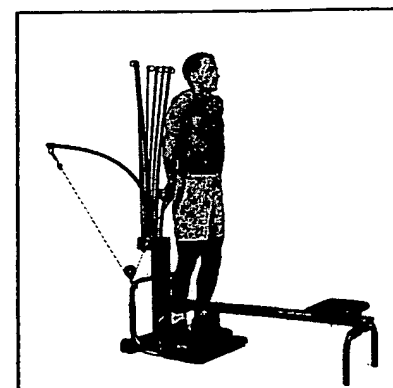
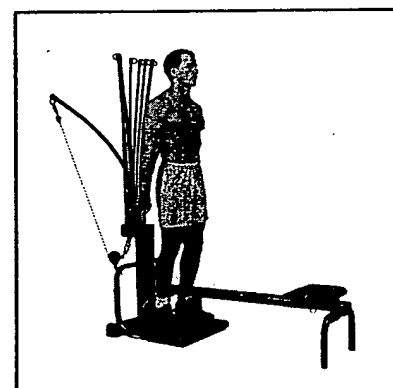
- Stand on the platform facing away from the power rods. Reach down and grasp the handles with the palms facing each other or facing backward, whichever is more comfortable.
- Let your arms hang extending in the direction of the pulleys.

Action:

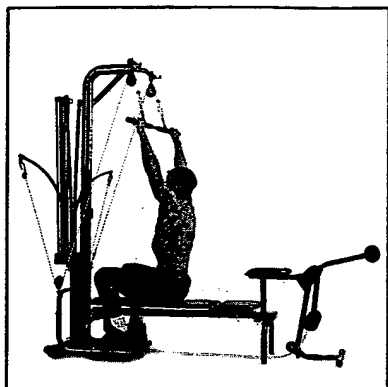
- Raise your shoulders towards the back of your head, making sure your neck/head position does not move.
- Slowly reverse the motion, keeping the upper trapezius muscles tight during the entire motion.

Key points:

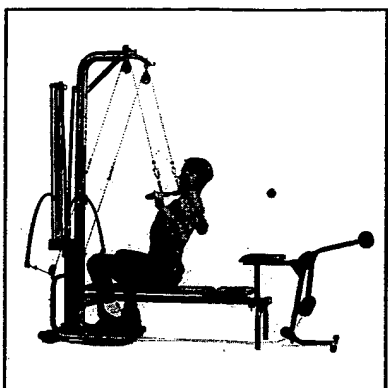
- Do not bend the neck backwards or forwards while raising the shoulders.
- Do not slouch upon lowering the shoulders.
- Keep the spine in good alignment throughout the entire motion.
- Make sure both shoulders raise evenly.
- For a variation, bend forward slightly from the hips, not the spine.



Back Exercises



START



FINISH

WIDE PULLDOWNS with the Lat Tower - Shoulder Adduction (with elbow flexion)

Muscles worked: This exercise emphasizes the latissimus dorsi, teres major and rear deltoid which make up the large pulling muscles of your upper back. It also involves the muscles on the front of your upper arms (the biceps group) which are responsible for bending your elbows.

Starting position:

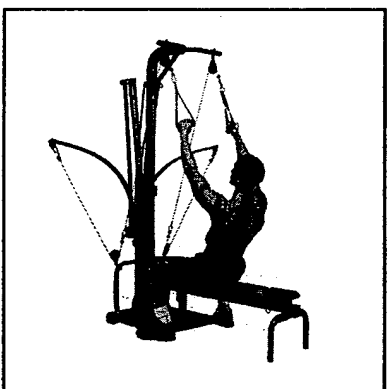
- To determine the appropriate grip width for you, hold your arms straight out to the sides at shoulder height. Bend your elbows approximately 90 degrees. Your hands should be no wider than your elbows. (for some individuals slightly less than elbow width is more comfortable)
- Facing the power rods, grasp the bar at a width determined above, then sit on the bench.
- Position your thighs directly under the pulleys and sit upright with your arms extending upward. NOTE: You may position your hips directly under the pulleys but then you must lean back slightly from hips (not the waist).
- Maintain good spinal alignment, chest lifted, abs tight and maintain a very slight arch in your lower back.

Action:

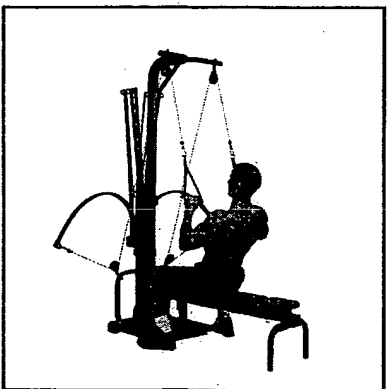
- Initiate the movement by pulling your shoulder blades down and together while simultaneously drawing your elbows downward to the sides, and then inward, towards your trunk.
- The bar may not touch your chest but, at the end of the motion, your arms should be drawn near your sides (although they may not be touching your sides), your shoulder blades should be fully depressed toward your hips and your forearms must be upward in line with the direction of the cables (not forward).
- Slowly return to the starting position allowing your arms and shoulder blades to move fully upward, without relaxing the muscles.

Key points:

- Do not lose spinal alignment.
- Keep the lats tightened throughout the entire motion.



START



FINISH

NARROW PULLDOWNS with the Lat Tower - Shoulder Extension (with elbow flexion)

Muscles worked: This exercise emphasizes the latissimus dorsi, teres major and rear deltoid which make up the large pulling muscles of your upper back. It also involves the muscles on the front of your upper arms (the biceps group) which are responsible for bending your elbows.

Starting position:

- Attach a single handle to each cable.
- Facing the power rods, grasp the handles with the corresponding hand, palms facing each other, and sit on the bench.
- Position your thighs directly under the pulleys and sit upright with your arms extending upward. NOTE: You may position your hips directly under the pulleys but then you must lean back slightly from hips (not the waist).
- Maintain good spinal alignment, chest lifted, abs tight and maintain a very slight arch in your lower back.

Action:

- Keeping your hands shoulder width, initiate the movement by pulling your shoulder blades down and together while simultaneously drawing your elbows downward to the front, and then inward, towards the sides of your body.
- At the end of the motion, your arms should be drawn near your sides (although may not be touching your sides), your shoulder blades should be fully depressed towards your hips and your forearms must be upward in line with the direction of the cables (not forward).
- Slowly return to the starting position allowing your arms and shoulder blades to move upward fully, without relaxing the muscles.

Key points:

- Do not lose spinal alignment.
- Keep the lats tightened throughout the entire motion.

LYING LAT PULLDOWNS - Modified

Muscles worked: This exercise emphasizes the latissimus dorsi, teres major and rear deltoid which make up the large pulling muscles of your upper back and eliminates the biceps from the movement.

Starting position:

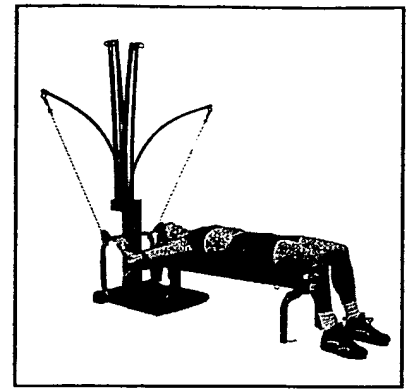
- Lie on your back on the bench, head toward the power rods. Your buttocks will eventually be off the end of the bench.
- Slip your arms through the handles and slide the cuff just past your elbows and tighten cuffs.
- Grasp the cable with your palms facing inward and slide your body down along the bench far enough that your arms are fully extended, knees bent and feet flat on the floor.
- Tighten your abdominals to stabilize your spine while maintaining a very slight arch in the lower back.

Action:

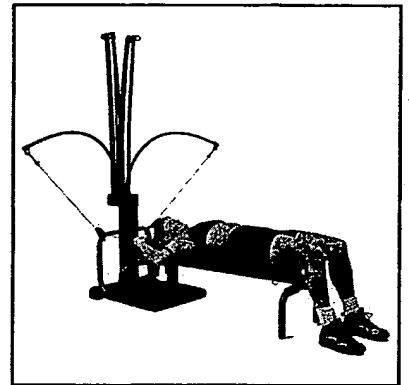
- Initiate the movement by pulling your shoulder blades down towards your bottom and then immediately start slowly pulling your elbows down towards your hips and then inward to the side of your body.
- Slowly return to the starting position, allowing your arms and shoulder blades to move back up towards the power rods without relaxing.

Key points:

- Do not lose spinal alignment.
- Keep the lats tightened throughout the entire motion.
- Release your shoulder blades at the end of each rep and initiate each new rep by depressing your shoulder blades.



START



FINISH

FUNCTIONAL LOW BACK EXTENSION - Seated (with hip extension)

Muscles worked: This exercise emphasizes the muscles in your low back (erector spinae and deep spinal muscles) that are necessary for providing stabilization and protection for the spine. The lower back muscles are challenged *isometrically* just like they should be used when lifting and carrying in daily life. The gluteus maximus and the hamstrings are also strengthened at the hip.

Starting position:

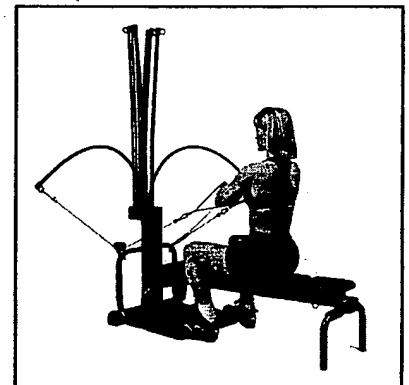
- Sit on the bench facing the power rods.
- Grab handles and slide them over your forearms near your elbows.
- Place heels on the end of the platform, bend the knees comfortably, cross your arms in front of your chest and pull handles tightly to your chest.
- Sit up straight, lift your chest, tighten your trunk muscles and maintain a slight arch in your lower back.
- Pinch your shoulder blades together slightly.
- Lean forward from the hips slightly letting out some of the tension in the cables.

Action:

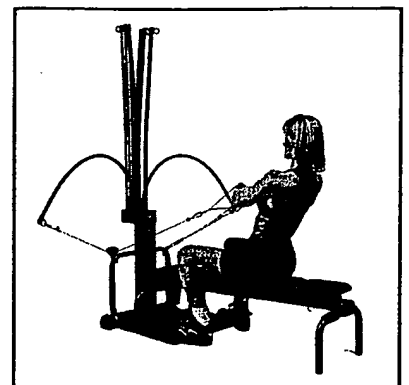
- Keeping your chest lifted, move your entire torso backwards as a unit by pivoting at the hips.
- Slowly return to the starting position without slouching or changing spinal alignment.

Key points:

- Keep your chest lifted and a very slight arch in your lower back at all times.
- Move from the hips only, not your waist. Do not increase or decrease the arch in your lower back during the movement.

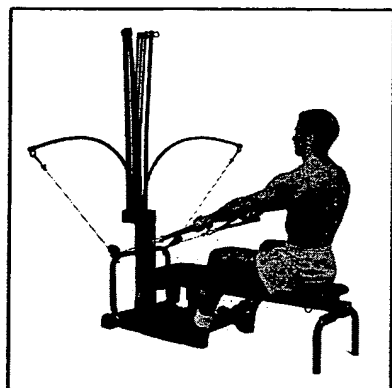


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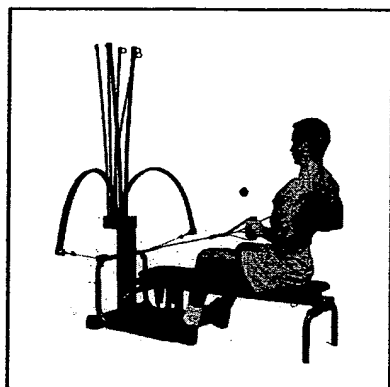


FINISH

Back Exercises



START



FINISH

SEATED LAT ROWS - Shoulder Extension (and elbow flexion)

Muscles worked: This exercise emphasizes the latissimus dorsi, teres major and rear deltoid muscles which make up the large pulling muscles of your upper back. The biceps muscles on the front of the upper arm are also involved in this movement.

Starting position:

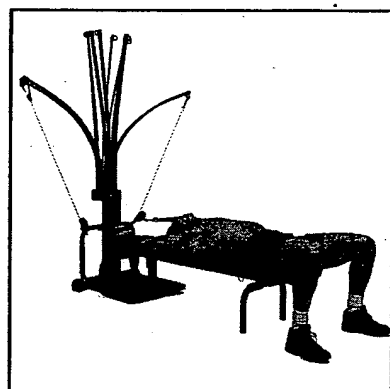
- Sit on the bench facing the power rods.
- Grab handles with palms facing each other.
- Place heels on the end of the platform, bend the knees comfortably.
- Sit up straight with your spine in good alignment.

Action:

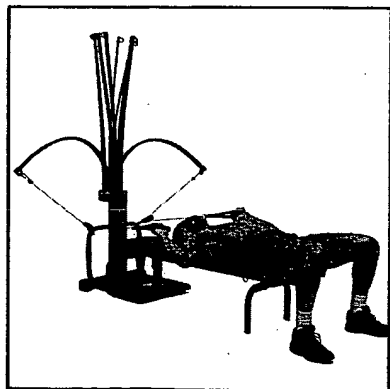
- Initiate the movement by pinching your shoulder blades together.
- Pull the upper arms downward and backward, brushing past the sides of the body while keeping the forearms pointing in the direction of the cable.
- Slowly return to the starting position.

Key points:

- Do not bend your torso forward at any point.
- Do not lose spinal alignment - keep chest lifted.
- Release your shoulder blades at the end of each rep and initiate each new rep by pinching your shoulder blades.



START



FINISH

LYING LAT PULLDOWNS - Shoulder Adduction

Muscles worked: This exercise emphasizes the latissimus dorsi, teres major and rear deltoid which make up the large pulling muscles of your upper back, as well as involving your biceps which are located on the front of your upper arms.

Starting position:

- Lie on your back on the bench, head toward the power rods. Your buttocks will eventually be off the end of the bench.
- Grasp the handles with your palms facing up and slide your body down along the bench far enough that your arms are fully extended, knees bent and feet flat on the floor.
- Tighten your abdominals to stabilize your spine while maintaining a very slight arch in the lower back.

Action:

- Initiate the movement by pulling your shoulder blades down toward your bottom and then immediately start slowly pulling your elbows down towards your hips and then inward to the side of your body.
- Slowly return to the starting position, allowing your arms and shoulder blades to move back up towards the power rods without relaxing.

Key points:

- Do not lose spinal alignment.
- Keep the lats tightened throughout the entire motion.
- Release your shoulder blades at the end of each rep and initiate each new rep by depressing your shoulder blades.

LYING LAT FLY - Shoulder Adduction

Muscles worked: This exercise emphasizes the latissimus dorsi, teres major and rear deltoid which make up the large pulling muscles of your upper back, as well as involving your biceps which are located on the front of your upper arms. Note: This motion can be further emphasized using the pulvis pec bar attachment.

Starting position:

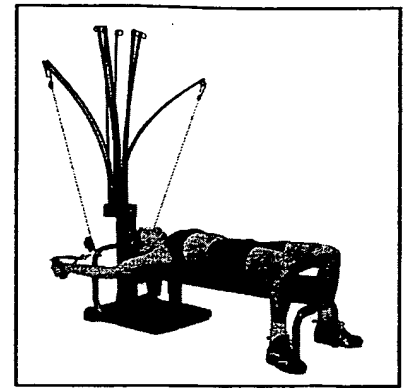
- Lie on your back, head toward the power rods.
- Grasp the handles and straighten the arms out to the sides with your palms facing away from the pulleys, knees bent, and feet flat on the floor.
- Tighten your abdominals to stabilize your spine while maintaining a very slight arch in the lower back.

Action:

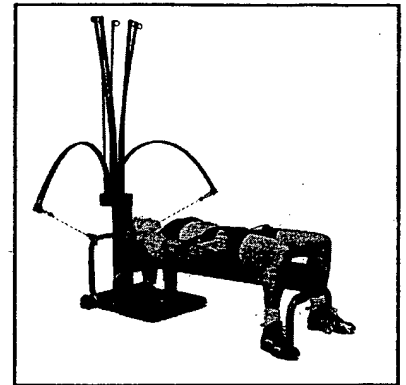
- Initiate the movement by pulling your shoulder blades down toward your bottom and then immediately start pulling your arms inward towards the sides of your body with a slow controlled motion.
- Slowly return to the starting position, allowing your arms and shoulder blades to move back up/out toward the power rods without relaxing.

Key points:

- Do not lose spinal alignment.
- Keep the lats tightened throughout the entire motion.
- Release your shoulder blades at the end of each rep and initiate each new rep by depressing your shoulder blades.



START



FINISH

REVERSE GRIP PULLDOWNS with the Lat Tower - Shoulder Extension (with elbow flexion)

Muscles worked: This exercise emphasizes the latissimus dorsi, teres major and rear deltoid which make up the large pulling muscles of your upper back. It also involves the muscles on the front of your upper arms (the biceps group) which are responsible for bending your elbows.

Starting position:

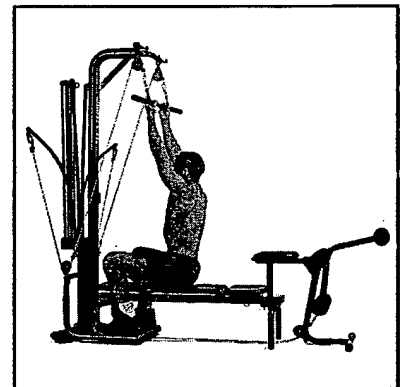
- Facing the power rods, grasp the bar with an underhand grip, at a width determined above. Then sit on the bench.
- Position your thighs directly under the pulleys and sit upright with your arms extending upward. NOTE: You may position your hips directly under the pulleys but then you must lean back slightly from hips (not the waist).
- Maintain good spinal alignment, chest lifted, abs tight and maintain a very slight arch in your lower back.

Action:

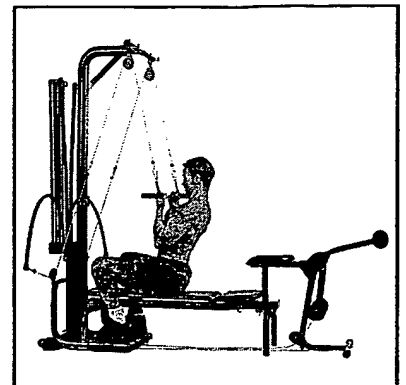
- Initiate the movement by pulling your shoulder blades down and together while simultaneously drawing your elbows downward to the sides, and then inward, towards your body.
- At the end of the motion, your arms should be drawn near your sides (although may not be touching your sides), your shoulder blades should be fully depressed towards your hips and your forearms must be upward in line with the direction of the cables (not forward).
- Slowly return to the starting position allowing your arms and shoulder blades to move fully upward, without relaxing the muscles.

Key points:

- Do not lose spinal alignment.
- Keep the lats tightened throughout the entire motion.

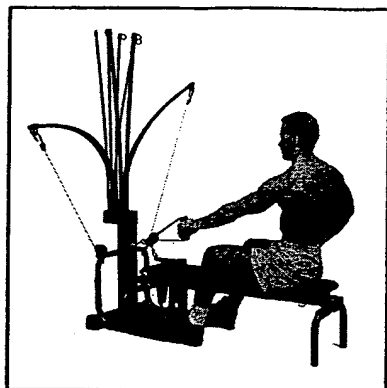


START

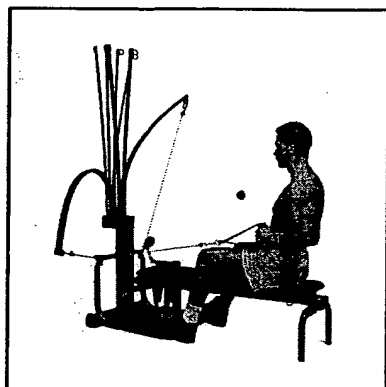


FINISH

Back Exercises



START



FINISH

ONE ARM SEATED LAT ROWS - Shoulder Extension (with elbow flexion)

Muscles worked: This exercise emphasizes the latissimus dorsi, teres major and rear deltoid muscles which make up the large pulling muscles of your upper back. The biceps muscles on the front of the upper arm are also involved in this movement.

Starting position:

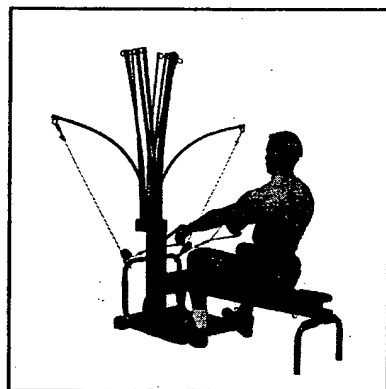
- Sit on the bench facing the power rods and grasp one handle.
- Place heels on the end of the platform, bend the knees comfortably, and allow your arm to bend slightly.
- Sit up straight with your spine in good alignment.
- Rest your non-involved hand on your hip, thigh or the bench to help stabilize the spine and to eliminate trunk rotation.

Action:

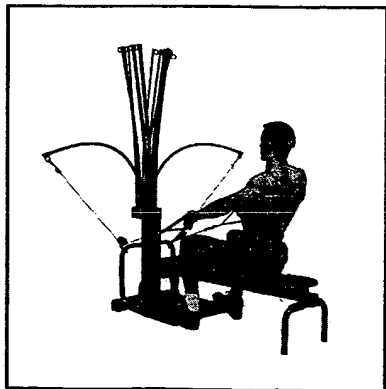
- Initiate the movement by pinching your shoulder blade.
- Pull the upper arm down and back, brushing past the side of your body while keeping the forearm pointing in the direction of the cable.
- Slowly return to the starting position.

Key points:

- Do not bend your torso forward.
- Do not lose spinal alignment - keep chest lifted.
- Keep the lats tightened throughout the entire motion.
- Release your shoulder blade at the end of each rep and initiate each new rep by retracting your shoulder blades.



START



FINISH

SCAPULAR RETRACTION

Muscles worked: This exercise develops the muscles between your shoulder blades (middle trapezius and rhomboids), that pull your shoulder blades together and are essential to good posture.

Starting position:

- Sit on the bench facing the power rods.
- Grab handles with palms facing each other.
- Place heels on the end of the platform, bend hips and knees comfortably, arms straight.
- Lift your chest, sit up straight with your spine in good alignment and tighten your trunk muscles.

Action:

- Keeping your arms straight, slowly pinch your shoulder blades together.
- When your shoulder blades are fully retracted, slowly return to the starting position.

Key points:

- Do not bend your torso forward.
- Do not lose spinal alignment - keep chest lifted.
- Do not pull with your arm muscles.

STIFF-ARM PULLDOWN with Lat Tower - Shoulder Extension (elbow stabilized)

Muscles worked: This exercise emphasizes your upper back (the latissimus dorsi, teres major and rear deltoid muscles), as well as the muscles between the lower part of your shoulder blades (lower trapezius muscles). The triceps muscles, located on the back of the upper arms, will also be involved.

Starting position:

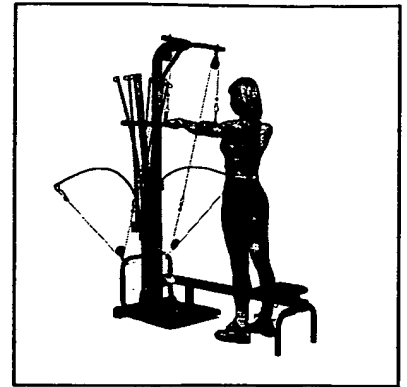
- Remove (or straddle) the bench and stand facing the power rods.
- Grasp the lat bar with your palms down.
- Step back slightly. This may have to be adjusted on the first rep to insure that there is enough movement in the cable to complete the range of motion.
- Bend over slightly from your hips (not the waist), lift your chest and tighten your abdominals to stabilize your spine while maintaining a very slight arch in the lower back.

Action:

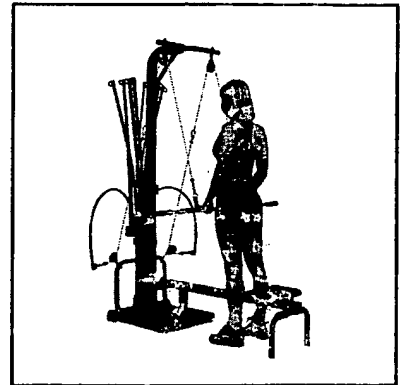
- Initiate the movement by "lowering" your shoulder blades down and together.
- Keeping your arms straight, continue by slowly moving your hands in an arc downward and then in toward your legs.
- Slowly return to the starting position without relaxing your muscles.

Key points:

- Do not lose spinal alignment - keep chest lifted.
- Keep the lats tightened throughout the entire motion.
- Release your shoulder blades at the end of each rep and initiate each new rep by depressing (lowering) your shoulder blades.
- Keep your elbows nearly straight (not locked) throughout the entire exercise.

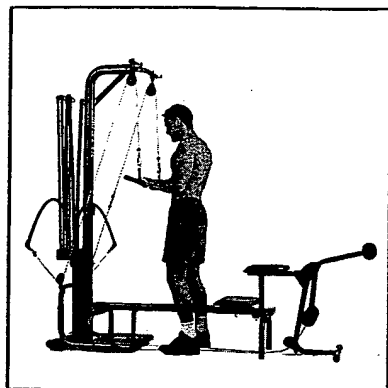


START

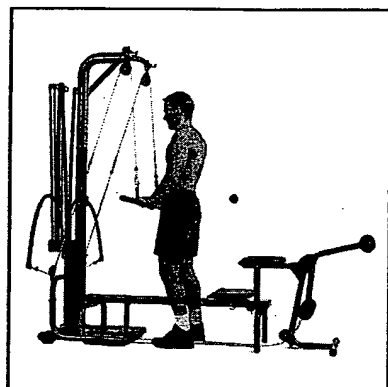


FINISH

Arm Exercises



START



FINISH

TRICEPS PUSHDOWN with Lat Tower - Elbow Extension

Muscles worked: This exercise emphasizes the triceps muscles located on the backs of the upper arms. These muscles are responsible for straightening your arm and assist in any upper body pushing or pressing motion.

Starting position:

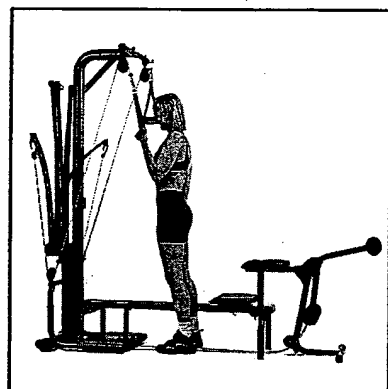
- Remove (or straddle) the bench and stand facing the power rods.
- Grasp the lat bar at shoulder width, with your palms down. NOTE: This exercise can also be performed with the single handles, moving simultaneously or one arm at a time.
- Adjust your distance from the pulleys (one to two feet in front of you). This may need to be altered after attempting the first rep.
- Bring your arms down to your sides, elbows straight.
- Bend over slightly from your hips, so that your shoulders are directly over your hands lift your chest and tighten your abdominals to stabilize your spine while maintaining a very slight arch in the lower back.

Action:

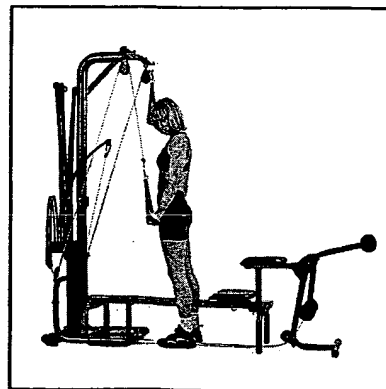
- Keeping your upper arms stationary and your elbows next to the sides of your torso, slowly allow your elbows to bend, moving your hands in an arcing motion away from your legs and upward.
- Stop at approximately 90 degrees.
- Thinking about tightening the triceps, slowly reverse the arcing motion and straighten your arms fully.

Key points:

- Keep your upper arms motionless.
- Keep wrists straight.
- Tighten the triceps throughout the exercise and control the motion on the way up.
- Maintain good posture by keeping your chest lifted, abs tight and maintain a very slight arch in your lower back.



START



FINISH

SINGLE ARM PUSHDOWN with Lat Tower - Elbow Extension

Muscles worked: This exercise emphasizes the triceps muscles located on the backs of the upper arms. These muscles are responsible for straightening your arm and assist in any upper body pushing or pressing motion.

Starting position:

- Remove (or straddle) the bench and stand facing the power rods.
- Attach hand grips to the lat tower in place of the bar.
- Grasp the hand grip, with your palms up.
- Adjust your distance from the pulleys (one to two feet in front of you). This may need to be altered after attempting the first rep.
- Bring your arms down to your sides, elbows straight.
- Bend over slightly from your hips, so that your shoulders are directly over your hands. Lift your chest and tighten your abdominals to stabilize your spine while maintaining a very slight arch in the lower back.

Action:

- Keeping your upper arms stationary and your elbows next to the sides of your torso, slowly allow your elbows to bend, moving your hands in an arcing motion away from your legs and upward.
- Stop at approximately 90 degrees.
- Thinking about tightening the triceps, slowly reverse the arcing motion and straighten your arm fully.

Key points:

- Keep your upper arm motionless.
- Keep wrists straight.
- Tighten the triceps throughout the exercise and control the motion on the way up.
- Maintain good posture by keeping your chest lifted, abs tight and maintain a very slight arch in your lower back.

FRENCH PRESS - Elbow Extension Overhead

Muscles worked: This exercise emphasizes the triceps muscles located on the backs of the upper arms.

Starting position:

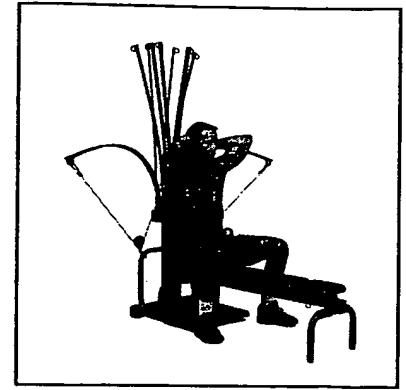
- Sit on the bench facing away from the power rods. Bend the knees and place your feet flat on the floor.
- Reach behind and grasp one or both of the handles, palms facing each other.
- Draw your arms up until your elbows are comfortably overhead (different for everyone) and your hands are pointed to the ceiling.
- Tighten your trunk muscles and maintain a very slight arch in your lower back.

Action:

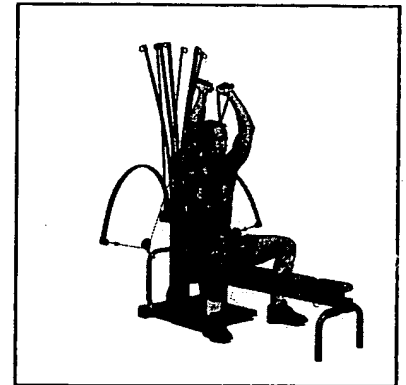
- Keeping your upper arm stationary, bend your elbows allowing your hands to move downward in an arcing motion.
- Stop your motion at approximately 90 degrees and then slowly reverse your arcing motion until your elbow is straight.

Key points:

- Keep your upper arm motionless.
- Keep wrists straight.
- Tighten the triceps throughout the exercise and control the motion on the way down.
- Keep your chest lifted, abs tight and maintain a very slight arch in your lower back.



START



FINISH

LYING TRICEPS EXTENSION - Elbow Extension

Muscles worked: This exercise emphasizes the triceps muscles located on the backs of the upper arms.

Starting position:

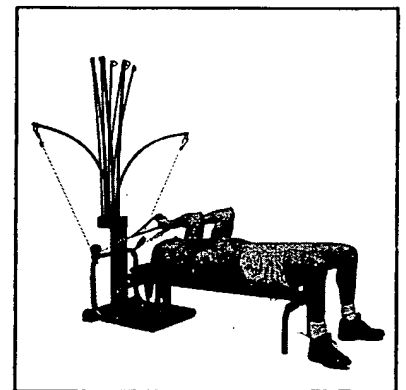
- Lie on your back with your head towards the Power Rods. Knees bent and your feet flat on the floor.
- Reach overhead and grasp the handles, palms facing towards the ceiling.
- Straighten your arms and bring them down directly beside your body.
- Raise your chest and "pinch" your shoulder blades together. Maintain a very slight arch in your lower back.

Action:

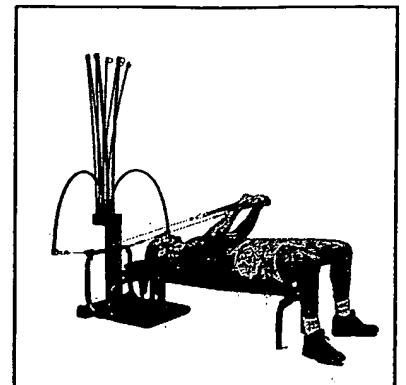
- Keeping your upper arms stationary and by your side, bend your elbows moving your hands in an arcing motion towards your chest.
- Stop your motion at approximately 90 degrees, then slowly reverse your arcing motion until your elbows are fully straight.

Key points:

- Keep your upper arms motionless.
- Keep wrists straight.
- Tighten the triceps throughout the exercise and control the motion on the way down.

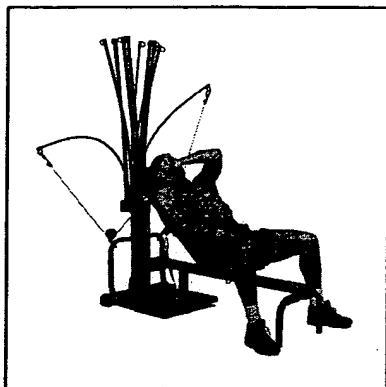


START



FINISH

Arm Exercises



START



FINISH

CROSS TRICEPS EXTENSION

Muscles worked: This exercise develops the triceps muscle located on the back of the upper arm.

Starting position:

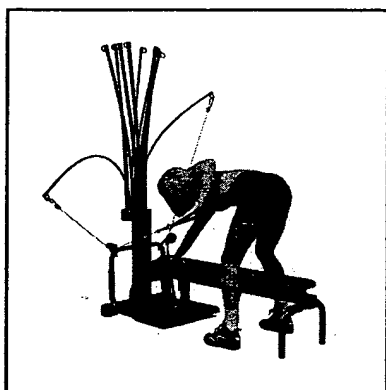
- Seated in the 45 degree position, reach straight behind your body, grasp a handle, and bend your elbow until your hand is near your chest and your palms are facing towards the floor.
- Keeping knees bent and feet flat on the floor, lay your head back against the bench and straighten your arm to the front.
- Then, reaching slightly across mid-line, grasp the handle, palm down, with the opposite arm.
- With your free hand lightly grasp the back of your arm near your elbow, to give yourself a reference point to help stabilize the working arm.
- Raise your chest and "pinch" your shoulder blades together. Maintain a very slight arch in your lower back.

Action:

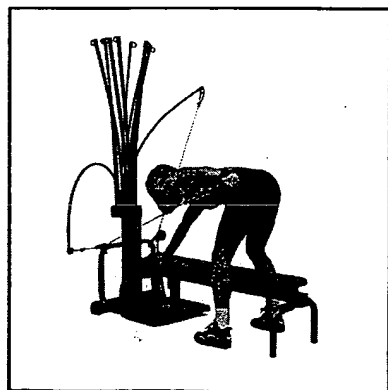
- Keeping your upper arm stationary, bend your elbow, moving your hand in an arcing motion across your chest.
- Stop your motion at approximately 90 degrees, then slowly reverse the arcing motion until your elbow is straight.

Key points:

- Keep your upper arm motionless.
- Keep wrist straight.
- Tighten your triceps throughout the exercise and control the motion on the way down.



START



FINISH

TRICEPS KICKBACK

Muscles worked: This exercise emphasizes the triceps muscles located on the backs of the upper arms.

Starting position:

- Straddle the bench facing the power rods, bend forward at the hips (not the waist) until the torso is parallel to the bench, keeping your chest lifted and maintaining a very slight arch in your lower back.
- Support yourself with one arm on the bench and grasp a handle with your free hand, palm facing inward.
- Draw your elbow back so that the upper arm is beside the body, parallel to the bench, and the elbow is bent approximately 90 degrees.

Action:

- Straighten elbow while keeping your upper arm completely still.
- When arm is completely straight, slowly return to the starting position.

Key points:

- Maintain spinal alignment.
- Keep your arm at your side and your wrist straight throughout entire motion.
- Tighten the triceps throughout the exercise and control the motion.

SEATED TRICEPS EXTENSION - Elbow Extension

Muscles worked: This exercise emphasizes the triceps muscles located on the backs of the upper arms.

Starting position:

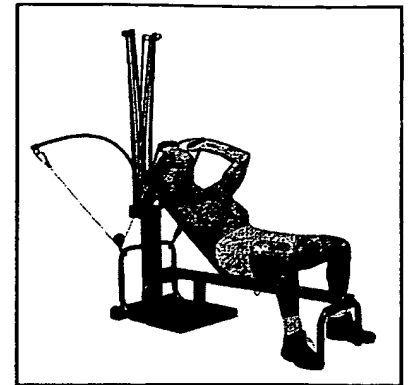
- Seated in the 45 degree position, reach straight behind your body, grasp the handles, and bend your elbows until your hands are near your chest and your palms are facing towards the floor.
- Keeping knees bent and feet flat on the floor, lay your head back against the bench and straighten your arms to the front.
- Be sure that your arms are directly "in line" with the cables, palms facing down and wrists straight.
- Raise your chest and "pinch" your shoulder blades together. Maintain a very slight, comfortable, arch in your lower back.

Action:

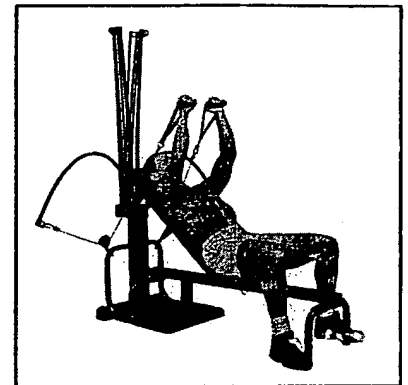
- Keeping your upper arms stationary, slowly bend your elbows allowing your hands to move in an arcing motion towards your head.
- Stop when the elbows are approximately 90 degrees.
- Slowly reverse your arcing motion until your elbows are straight.

Key points:

- Keep your upper arms/shoulders motionless.
- Keep wrists straight.
- Tighten the triceps throughout the exercise and control the motion on the way down.



START



FINISH

STANDING BICEPS CURL - Elbow Flexion (in supination)

Muscles worked: This exercise emphasizes and develops the biceps muscles which are located on the front of your upper arms and are primarily responsible for bending your elbows.

Starting position:

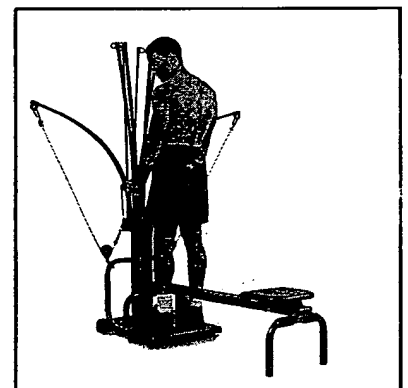
- Remove the bench and stand on the platform, straddle the rail, facing the power rods.
- Bend down and grasp the handles with your palms facing forward.
- Stand with your upper arms by your sides (although not "smashed" against them). Lift your chest, tighten your abdominals and maintain a very slight arch in your lower back.

Action:

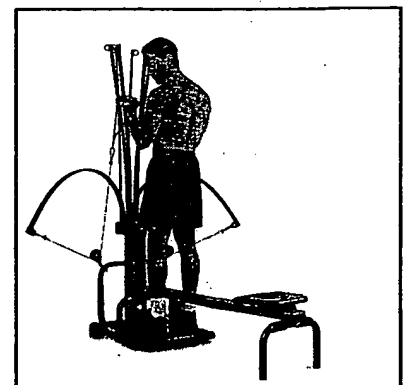
- Curl handles forward, then upward, and then in towards shoulders while keeping your elbows at your sides and your upper arms completely still.
- Slowly lower to the starting position by performing the same arcing motion.

Key points:

- Keep elbows at your sides.
- Keep wrists straight.
- Keep your trunk muscles tight and maintain a very slight arch in your lower back.

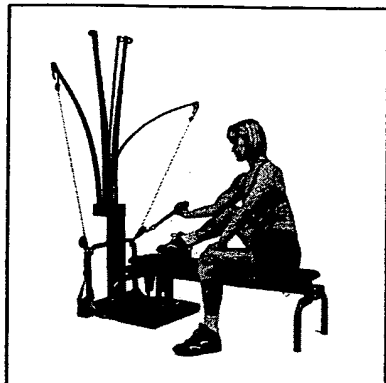


START

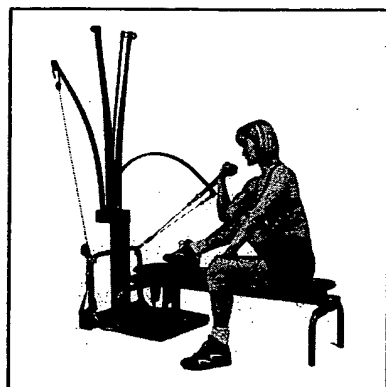


FINISH

Arm Exercises



START



FINISH

SEATED BICEPS CURL - Flexion (in supination)

Muscles worked: This exercise emphasizes the biceps muscles which are located on the front of your upper arms and are primarily responsible for bending your elbows.

Seated position:

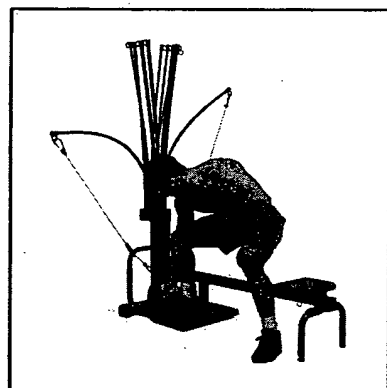
- Sit facing the Power Rods, knees bent with one foot on the bench and one on the floor.
- Grasp the handle and rest the back of your upper arm, not your elbow, on the elevated knee.
- Maintain correct spinal alignment.

Action:

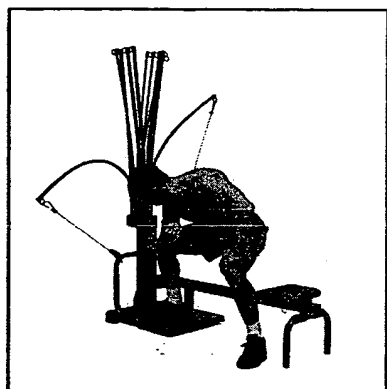
- Curl the forearm towards the upper arm, keeping your upper arm completely still.
- Slowly return to the starting position without relaxing the biceps.

Key points:

- Do not rock the upper body while bending your elbow.
- Keep wrist straight.
- Keep your chest lifted, trunk muscles tight and maintain a very slight arch in your lower back.



START



FINISH

CONCENTRATION BICEPS CURL - Elbow Flexion (in supination)

Muscles worked: This exercise emphasizes the biceps muscles which are located on the front of your upper arms and are primarily responsible for bending your elbows.

Starting position:

- Stand, one foot on the platform, one foot on the floor, and one side towards the power rods.
- With the hand closest to the power rods, grasp the handle.
- Keeping your back straight, bend at the hips and knees, until your trunk is parallel to the floor. Place the uninvolved hand on the thigh to help stabilize.
- Straighten your elbow and point your arm towards the floor.

Action:

- Curl handle away from the pulley, then upward towards the shoulder while keeping the upper arm completely motionless and your elbow pointing directly toward the floor at all times.
- Slowly return to the starting position performing the same arc of motion.

Key points:

- Keep the elbow pointing toward the floor at all times.
- Keep wrist straight
- Bend at the hips, not at the waist.
- Keep your back straight, chest up and maintain a very slight arch in your lower back.

SEATED WRIST EXTENSION

Muscles works: This exercise develops the back and top parts of your forearms and is critical in helping to prevent injuries like tennis elbow.

Starting position:

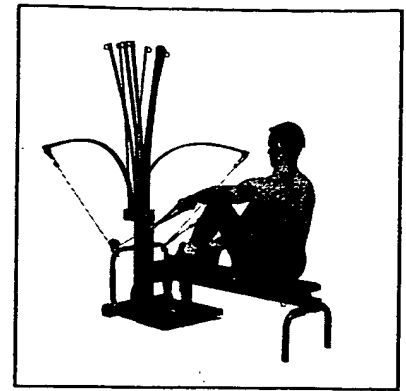
- Sit facing the power rods with your knees bent and feet flat on the bench.
- Grasp the handles with your palms facing down and rest your mid-forearms on your upper legs with the elbows flared out to the sides.
- Be sure to sit far enough backwards on the bench to maintain tension throughout the exercise.
- Raise your chest, tighten your trunk muscles and maintain a very slight arch in your lower back.

Action:

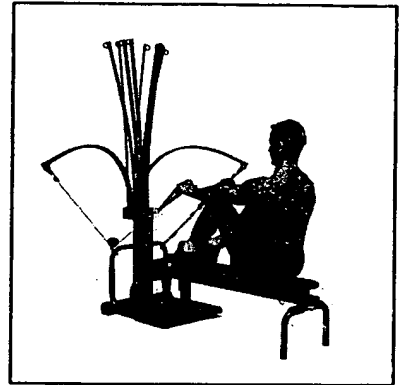
- Slowly curl the back of your fists towards the forearms.
- Slowly return to the starting position.

Key points:

- Move slowly and keep tension in the back of the forearms at all times.
- You can perform this exercise one arm at a time to make it easier to focus and isolate the back of your forearms, or you can perform it with both arms simultaneously to save time.



START



FINISH

STANDING WRIST CURL

Muscles worked: This exercise emphasizes the front part of your forearms as well as increasing the strength of your grip. It also isometrically challenges your biceps muscles, located on the front part of your upper arms.

Starting position:

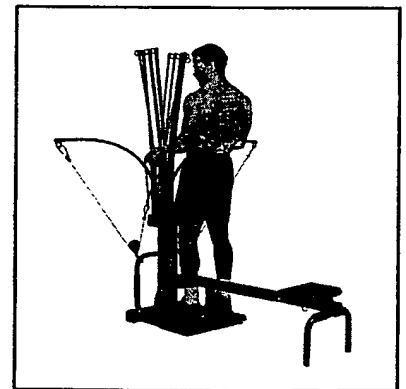
- Remove the bench and stand on the platform facing the power rods.
- Bend down and grasp the handles with your palms facing forward.
- Stand with your upper arms and elbows by your sides.
- Lift your chest, tighten your trunk muscles and maintain a very slight arch in your lower back.
- Bend your arm 90 degrees, palms up, and hold that position throughout the entire exercise.

Action:

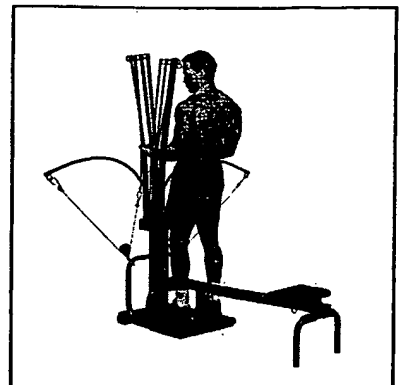
- Slowly curl your fists towards the front of your forearms.
- Keeping your forearms still, slowly let your fists return to the starting position.

Key points:

- Move slowly and keep tension in the front of the forearm at all times.
- Do not increase or decrease the bend in your arm, perform the entire motion at your wrist.
- Do not rock your body. Keep your chest lifted, abs tight and maintain a slight arch in your lower back.

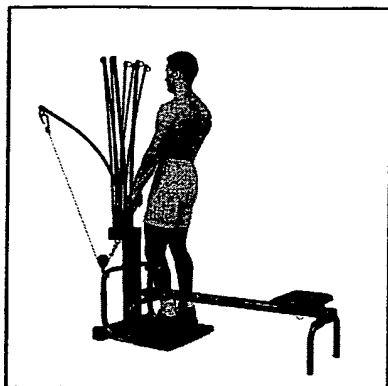


START

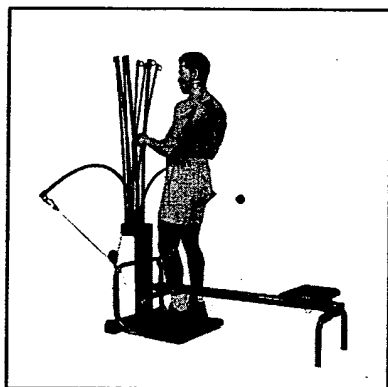


FINISH

Arm Exercises



START



FINISH

REVERSE CURL - Elbow Flexion (in pronation)

Muscles worked: This exercise emphasizes the deep arm muscle (brachialis) while involving the front forearm muscle (brachioradialis) and the biceps as well.

Starting position:

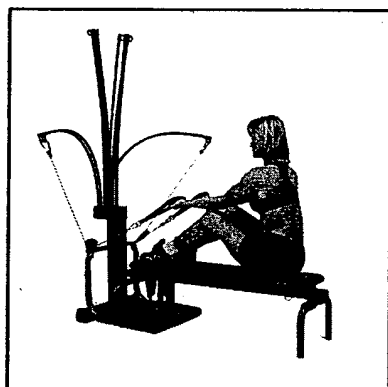
- Remove the bench and stand on the platform facing the power rods.
- Bend down and grasp the handles with your palms facing backward.
- Stand with your arms by your sides.
- Lift your chest, tighten your abdominals and maintain a very slight arch in your lower back.

Action:

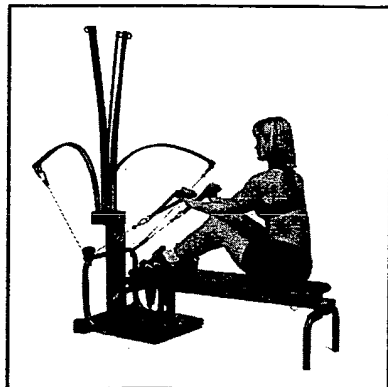
- Keeping the palms facing down, slowly curl the handles forward, then upward, then in towards your shoulders while keeping your elbows at your sides and your upper arms completely still.
- Slowly lower to the starting position.

Key points:

- Keep elbows at your sides.
- Keep wrists straight.
- Keep your trunk muscles tight and maintain a very slight arch in your lower back.



START



FINISH

SEATED WRIST CURL - Wrist Flexion

Muscles worked: This exercise develops the front part of your forearms as well as increasing the grip strength.

Starting position:

- Sit facing the power rods with your knees bent and feet flat on the bench.
- Grasp the handles with your palms facing up and rest your forearms on your thighs, allowing the wrists to bend above the knees.
- Raise your chest, tighten your trunk muscles and maintain a very slight arch in your lower back.

Action:

- Slowly curl your fists towards the front of your forearms.
- Slowly return to the starting position without relaxing the wrists.

Key points:

- Move slowly and keep tension in the front of the forearms at all times.
- You can perform this exercise one arm at a time to make it easier to focus and isolate the front of your forearms, or you can perform it with both arms simultaneously to save time.

STANDING WRIST EXTENSION

Muscles worked: This exercise emphasizes the back and top parts of your forearms. It also isometrically challenges your deep biceps muscles (brachialis), located on the front part of your upper arms.

Starting position:

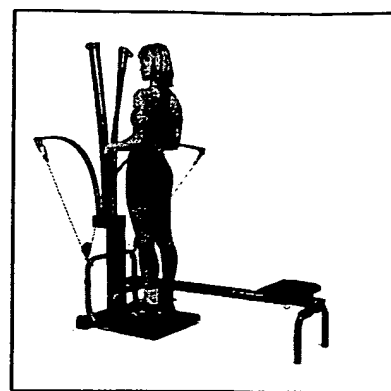
- Remove the bench and stand on the platform facing the power rods.
- Bend down and grasp the handles with your palms facing backwards.
- Stand with your upper arms by your sides.
- Lift your chest, tighten your trunk muscles and maintain a very slight arch in your lower back.
- Bend your elbows 90 degrees hold that elbow position throughout the entire exercise.

Action:

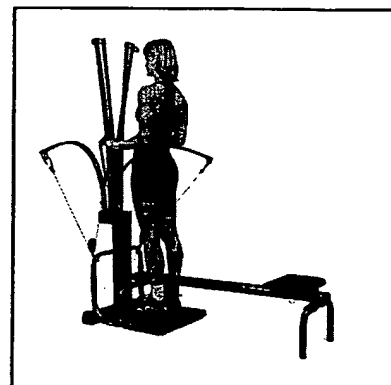
- Slowly curl the backs of your fists towards the forearms.
- Keeping your forearms still, slowly return to the starting position.

Key points:

- Move slowly and never relax the wrist.
- Do not increase or decrease the bend in your elbow, perform the entire motion at your wrist.
- Do not rock your body. Keep your chest lifted, abs tight and maintain a slight arch in your lower back.



START



FINISH

LYING BICEPS CURL - Elbow Flexion (in supination)

Muscles worked: This exercise emphasizes and develops the biceps muscles which are located on the front of your upper arms and are primarily responsible for bending your elbows.

Position:

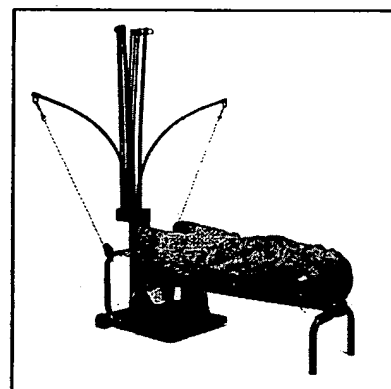
- Sit on the bench facing the power rods, knees bent and feet flat on the platform.
- Grasp the handles, with your arms straight and your palms facing up. Lie back completely so that your head is supported by the bench.
- Keep your chest up, abdominals tight and maintain a slight arch in your lower back.

Action:

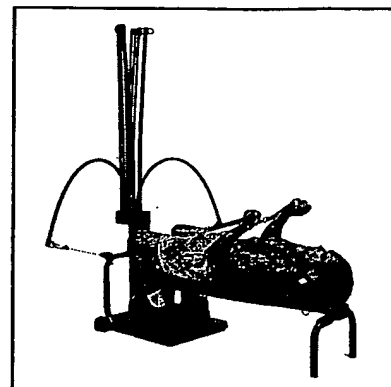
- Curl handles forward, then upward, and then in towards shoulders while keeping your elbows at your sides and your upper arms completely still.
- Slowly lower to the starting position by performing the same arcing motion.

Key points:

- Keep elbows at your sides.
- Keep wrists straight.
- Keep your trunk muscles tight and maintain a very slight arch in your lower back.

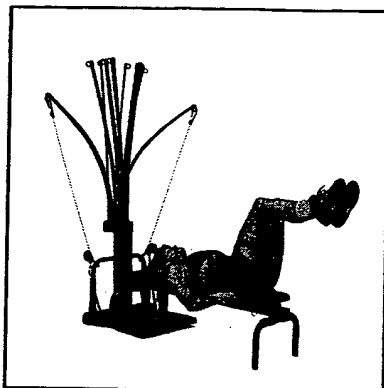


START

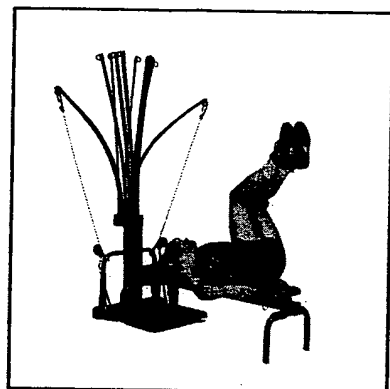


FINISH

Abdominal Exercises



START



FINISH

REVERSE CRUNCH - Spinal Flexion

Muscles worked: This exercise works your entire abdominal area including your upper and lower front abs (rectus abdominus) and your side abs (obliques).

Starting position:

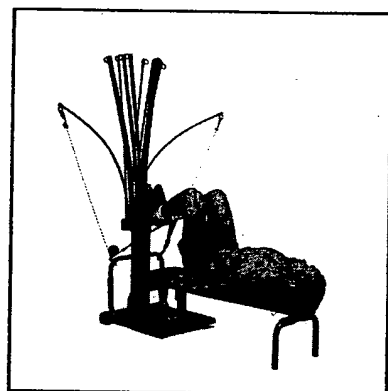
- With the bench in the flat position, lie on your back with your head towards the power rods.
- Bend your knees fully.
- Bend at the hips based upon desired difficulty. Beginners should be fully bent, bringing the legs near the abs. As strength improves the legs can be positioned further away. **DETERMINE THESE POSITIONS AND MAINTAIN THROUGHOUT THE EXERCISE.**
- Reach overhead grasp either the bench, or the metal frame, with each hand.
- Relax your neck.

Action:

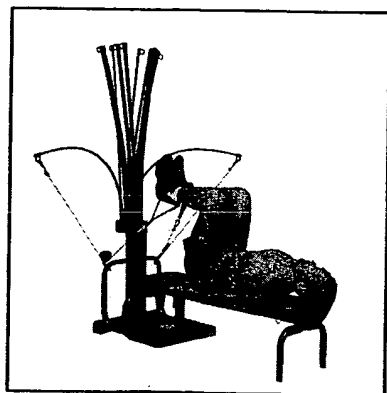
- Tighten your abs and slowly curl your hips towards your rib cage. Move as far as you can without using your legs to get momentum and do not curl up onto your shoulder blades.
- Slowly reverse the motion returning to the starting position without relaxing.

Key points:

- Tighten your abs before you move.
- Keep knees and hips stationary.
- Allow exhalation up and inhalation down without exaggerating breathing.
- Contract as far into the movement as possible. Lower under control. Keep abs tight during the entire motion.



START



FINISH

RESISTED REVERSE CRUNCH

Muscles worked: This exercise works your entire abdominal area including your upper and lower front abs (rectus abdominus) and your side abs (obliques).

Starting position:

- With the bench in the flat position, sit facing the power rods and attach both ankle cuffs over each ankle.
- Lie flat on your back on the bench with your head facing away from the Power Rods.
- Bend your hips and knees as pictured.
- Reach overhead and grasp the bench.
- Relax your neck.

Action:

- Tighten your abs and slowly curl your hips towards your rib cage. Move as far as you can without using your legs to get momentum and do not curl up onto your shoulder blades.
- Slowly reverse the motion returning to the starting position without relaxing.

Key points:

- Tighten your abs before you move.
- Keep knees and hips stationary.
- Allow exhalation up and inhalation down without exaggerating breathing.
- Contract as far into the movement as possible. Lower under control. Keep abs tight during the entire motion.

Abdominal Exercises

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SEATED (RESISTED) ABDOMINAL CRUNCH - Spinal Flexion

Muscles worked: This exercise emphasizes the abdominal area including the upper and lower front abs (rectus abdominus) and the side abs (obliques).

Starting position:

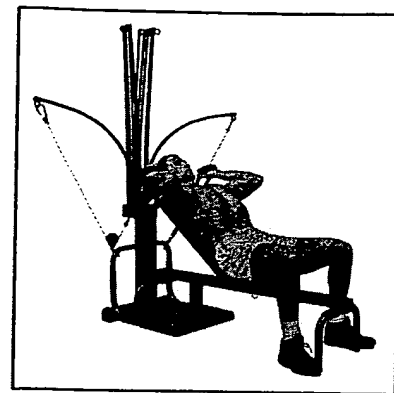
- While seated in the 45 degree position, grasp both handles drawing them over the shoulders and resting the handles on the chest/shoulders with your palms facing upward.
- Your lower back can start out flat or in a normal arch, knees and hips are bent and your feet are flat on the floor.

Action:

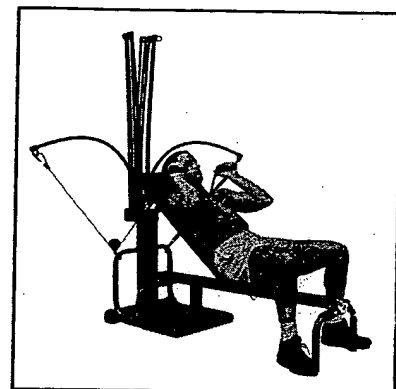
- Tighten your abs and curl only your torso, slowly moving your ribs towards your hips. Move as far as you can without moving the hips or neck. **THE LOWER BACK SHOULD NOT LOSE CONTACT WITH THE BENCH** when fully crunched.
- Slowly reverse the motion returning to the starting position, without relaxing.

Key points:

- Allow exhalation up and inhalation down, don't exaggerate it.
- Do not lift your head/chin. Your head should follow the rib motion, not lead, allowing you to maintain normal neck posture.
- Tighten your abdominals throughout the entire exercise range of motion. Do not let your abs relax until the set is over.
- **MOVING SLOWLY** to eliminate momentum is critical.



START



FINISH

SEATED (RESISTED) OBLIQUE ABDOMINAL CRUNCH - Spinal Flexion/Rotation

Muscles worked: This exercise emphasizes the external obliques on the resistance side and the internal obliques on the opposite side.

Starting position:

- While seated in the 45 degree position, grasp one handle drawing it up and over one shoulder, resting the handle on your chest/shoulder with your palm facing upward.
- Your lower back can start out flat or in a normal arch, knees and hips are bent and your feet are flat on the floor.

Action:

- Tighten your abs on one side of your body before you move, focusing on the area from the side of your ribs to the front of your pelvis on the same side.
- Slowly move diagonally, rotating and curling your torso, with the side of your ribs directed toward the front of your pelvis.
- Move as far as you can, moving the hips or moving the lower back from the bench.
- Slowly reverse the motion returning to the starting position without resting.

Key Points:

- Allow exhalation up and inhalation down, don't exaggerate it.
- Do not lift your head/chin. Your head should follow the rib motion, not lead, allowing you to maintain normal neck posture.
- Tighten your abdominals throughout the entire exercise range of motion. Do not let your abs relax until the set is over.
- **MOVING SLOWLY** to eliminate momentum is critical.

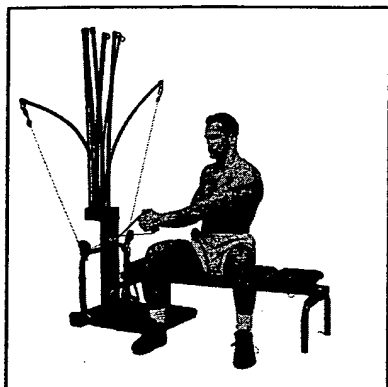


START

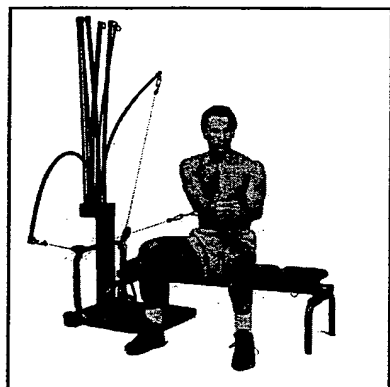


FINISH

Abdominal Exercises



START



FINISH

TRUNK ROTATION

Muscles worked: This exercise involves most of the trunk muscles. It does not "spot reduce" or eliminate "love handles". It should be noted that rotation is more limited in the spine than most people realize and should be performed with minimal resistance, and always in proper alignment.

Starting position:

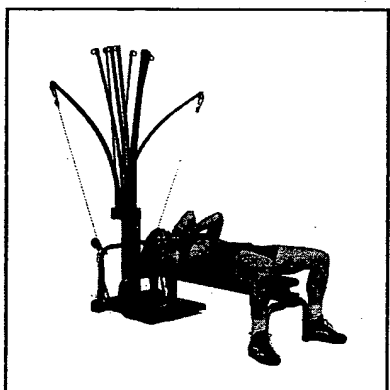
- Sitting sideways on the bench with one side facing the Power Rods, grasp the handle closest to you with both hands.
- Raise both arms up to shoulder level, centered in front of the middle chest.
- Keep elbows slightly bent.
- Lift your chest, pinch your shoulder blades together, tighten your abs and maintain a very slight arch in your lower back.

Action:

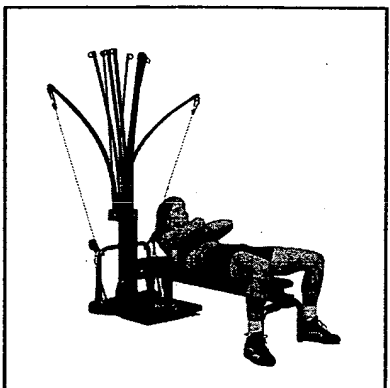
- Tighten your entire abdominal area and slowly rotate your rib cage/arms away from the cables (30 - 40 degrees), as if you were rotating with a rod through the middle of your spine.
- Slowly return to the starting position.

Key points:

- This is a high risk exercise that may cause injury if done incorrectly. Keep your chest lifted and always maintain your spine in good alignment with a very slight arch in your lower back.
- Keep your hands centered in front of the middle of your chest (sternum) and your shoulder blades "pinched" together. Insure that all of your motion occurs in the torso.
- Remember, more range of motion is not necessarily better, especially in this exercise. Move only as far as your muscles will take you. Try to eliminate uncontrolled momentum.
- Caution - Do not use heavy resistance for this exercise. Pick a weight that allows you to perform at least 12 - 15 reps.



START



FINISH

ABDOMINAL CRUNCH - Spinal Flexion

Muscles worked: This exercise emphasizes the abdominal area including the upper and lower front abs (rectus abdominus) and the side abs (obliques).

Starting position:

- Lie face up on the bench with your head near the power rods.
- Your lower back can start out flat or in a normal arch, knees and hips are bent and your feet are flat on the floor.
- Fold your arms across your chest.

Action:

- Tighten your abs and curl only your torso, slowly moving your ribs towards your hips. Move as far as you can without moving the hips or neck.
- Slowly reverse the motion returning to the starting position, without relaxing.

Key points:

- Allow exhalation up and inhalation down, don't exaggerate it.
- Do not lift your head/chin. Your head should follow the rib motion not lead, allowing you to maintain normal neck posture.
- Tighten your abdominals throughout the entire exercise range of motion. Do not let your abs relax until the set is over.
- MOVING SLOWLY to eliminate momentum is critical.

Leg Exercises

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LEG EXTENSION with attachment

Muscles worked: This exercise emphasizes the muscles on the front of the upper thigh (quadriceps muscle group) which are responsible for straightening your leg against resistance. This powerful muscle group helps to provide stability for the knee joint and is essential for producing power in running, jumping and lifting activities.

Starting position:

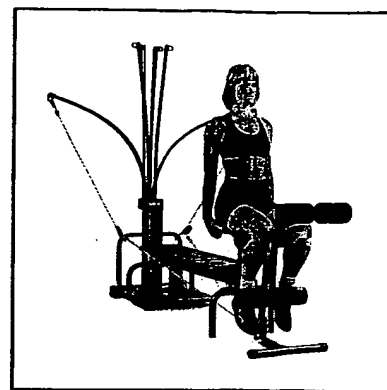
- Sit on the seat facing away from the power rods with your knees near the pivot point and the lower roller pads on your shins (see picture).
- Adjust your thighs to hip width pointing your knee caps straight to the front.
- Grasp the sides of the seat.
- Sit up straight with your chest lifted, abs tight and maintain a very slight arch in your lower back.

Action:

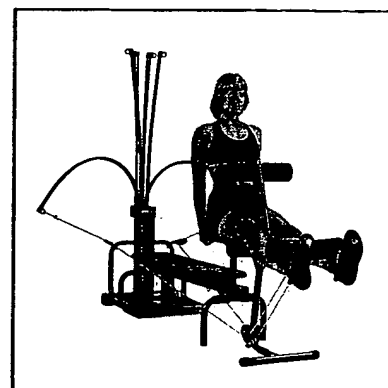
- Tighten your quads and straighten your legs by moving your feet forward and then upward until your legs are completely straight and your kneecaps are pointing up towards the ceiling (not turned outward).
- Then slowly return to the starting position keeping tension in your quads during the entire movement.

Key points:

- Use slow controlled motion. Do not "kick" into extension.
- Do not let your knees rotate outward during the exercise. Keep your kneecaps pointing up and straight forward.



START



FINISH

LEG CURL with attachment

Muscles worked: This exercise emphasizes the hamstring muscle group (biceps femoris, semimembranosus, semitenonousus) on the back of the thigh.

Starting position:

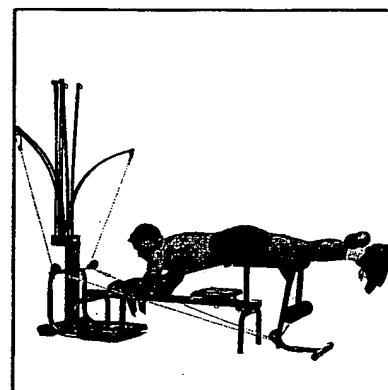
- With the bench attached to the seat of the leg unit, lie face down with your knees near the pivot point and ankles under the upper roller pads.
- Place your hands on the floor or grasp the rail or bench for stability.
- Tighten your abs to prevent spinal motion and very slightly lift your knees, placing the pressure on your thighs.

Action:

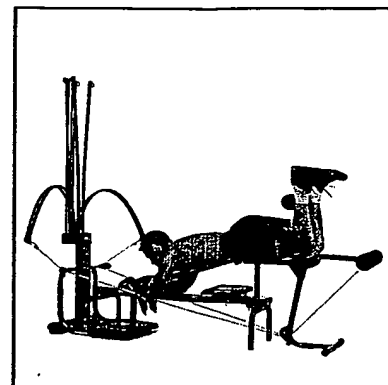
- Slowly bend your knees, upward and then towards your hips without moving your spine and without your hips lifting from the bench.
- Keeping the hamstrings tight, slowly allow your legs to straighten and return near the starting position. Do not fully extend your legs.

Key points:

- Make sure that you straighten your legs under control, do not allow your knees to hyperextend.
- Keep your chest lifted, abs tight and maintain a very slight arch in your lower back.

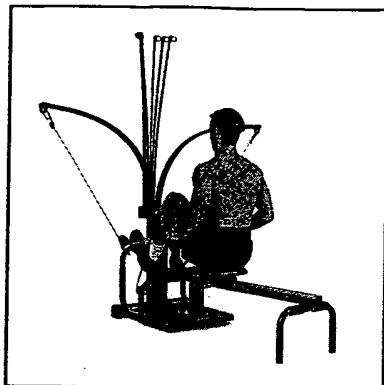


START

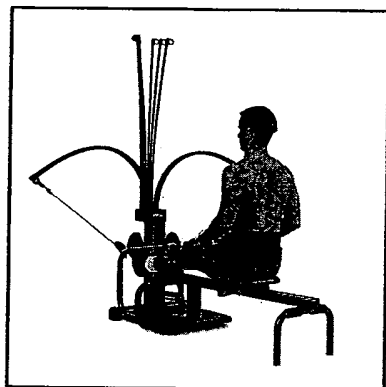


FINISH

Leg Exercises



START



FINISH

LEG PRESS - Hip and Knee Extension

Muscles worked: This exercise develops overall lower body pushing strength, primarily emphasizing your knee extensors on the front of your thighs (quadriceps), your hip extensors muscles on your rear (gluteus maximus), as well as on your inner thighs (adductor muscle groups).

Starting position:

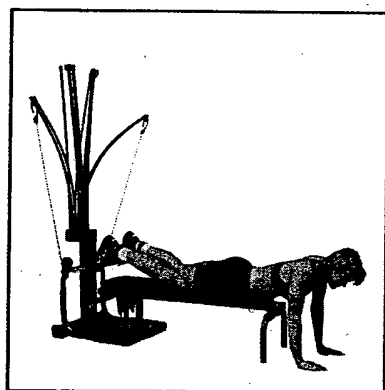
- Remove the bench and unlock the rowing seat.
- Sit on the seat facing the power rods with the leg press belt attached and adjusted, supporting your feet on the upright pulley frame as shown. The belt should be placed around the pelvis, not the spine.
- Lift your chest, tighten your abs and maintain a very slight arch in your lower back.
- Straighten your legs, but do not lock your knees.
- You may rest your hands around the sides of the belt, on the sides of the seat, or you may fold your arms across your chest, whichever is more comfortable.

Action:

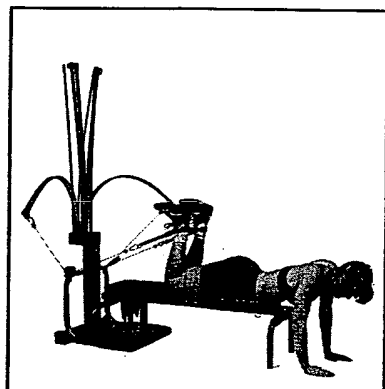
- Bend your knees and hips slowly allowing yourself to slide toward the Power Rods.
- Limit your slide to a position that allows you to still maintain good spinal posture, with your chest lifted, abs tight and a slight arch in your lower back.
- Slowly return to the starting position.

Key points:

- Keep your spine in good posture.
- Straighten but do not "lock out" your knees. Keep your quads tightened throughout the entire motion.
- Do not use momentum, MOVE SLOWLY, do not "launch" yourself when you straighten your knees.



START



FINISH

LYING (PRONE) LEG CURL - Knee Flexion

Muscles worked: This exercise emphasizes the hamstring muscle group (biceps femoris, semimembranosus, semitenonosis) on the back of the thigh.

Starting position:

- Seated on the flat bench, attach the cuffs to the corresponding ankles.
- Turn and lie on your stomach with your head facing away from the Power Rods. The cables will cross. Keep your feet together and your hands flat on the floor helping to provide stability.
- Move forward to provide tension in the cables.
- Look toward the floor to keep your neck in good alignment and tighten your abdominals.
- Lift your knees very slightly (less than a half inch) off of the bench by pressing your hips into the bench and hold them completely still.

Action:

- Slowly bend your knees, moving your feet in an arc upward and then inward towards your buttocks.
- Then slowly allow your legs to straighten through the arc described, returning to the starting position without relaxing.

Key points:

- Keep your upper leg motionless during the entire exercise.
- Keep your abs tight and do not lift your hips or excessively arch your back.

Leg Exercises

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STANDING HIP EXTENSION (Knee flexed)

Muscles worked: This exercise strengthens and develops the muscles of your buttocks area (gluteus maximus). Remember, there is no such thing as "spot reduction". Do not do this exercise if you believe it will remove fat from this area. Do it to strengthen and build these muscles.

Starting position:

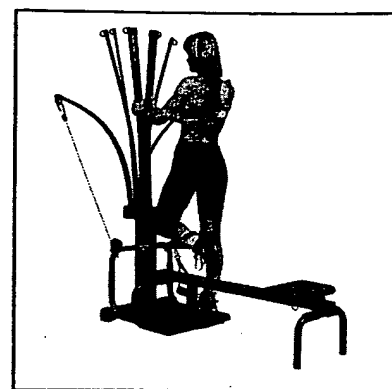
- Remove the bench.
- Facing the power rods, stand on the platform, straddling the rail.
- Secure the cuff around the ankle furthest from the rail. Keep this leg bent at approximately 90 degrees.
- Bend over 30 - 45 degrees from your hips (not your waist) and very slightly bend the knee of your support leg.
- Keep your spine in good posture, with your chest lifted, abs tight and maintain a very slight arch in your lower back.

Action:

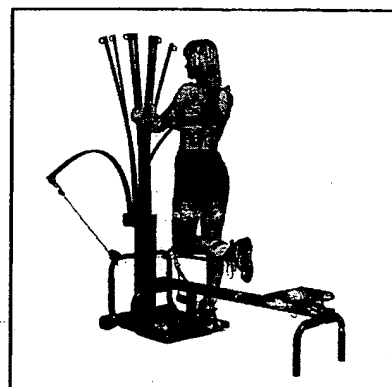
- Initiate the movement by tightening your glutes. Extend your hip by moving your entire leg backward.
- Slowly move your leg as far as you can, without allowing ANY movement to occur at your waist.
- Then slowly return to the starting position.

Key points:

- Make sure all of your motion occurs at your hip, NOT your waist or low back.
- Keep your abs tight throughout the entire exercise.
- Maintain exactly the same bend in the knee of your moving leg throughout the entire exercise.



START



FINISH

STANDING HIP FLEXION (Knee flexion)

Muscles worked: This exercise primarily develops and strengthens the muscles on the front of your hips (iliopsoas and rectus femoris) that are primarily responsible for bending or flexing your hips.

Starting position:

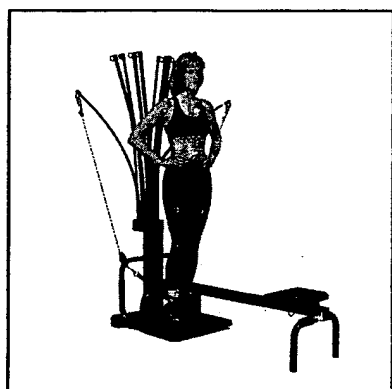
- Remove the bench.
- Stand on the base platform, facing away from the power rods, straddling the rail.
- Secure the cuff around the ankle furthest from the rail.
- Straighten, but do not lock, the knee of your support leg.
- Keep your spine in good posture with your chest lifted, abs tight and maintain a very slight arch in your lower back.

Action:

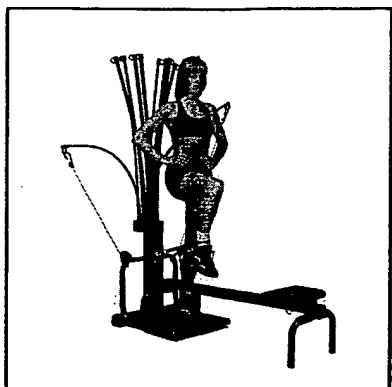
- Initiate the movement by lifting your knee up and in toward your torso.
- Allowing the knee to bend as you move, bring your knee upward as far as you can, without allowing ANY movement to occur at your waist or lower back.
- Slowly return to the starting position without resting your leg muscles.

Key points:

- Make sure all of your motion occurs at your hip, NOT your waist or lower back.
- Keep your chest lifted and trunk muscles tight throughout the entire exercise.
- Allow your lower leg to hang in the direction of the cable at all times.

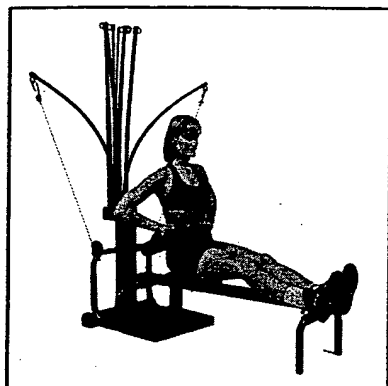


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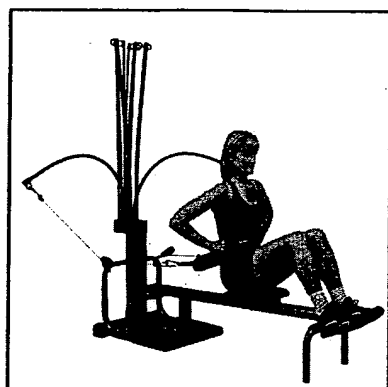


FINISH

Leg Exercises



START



FINISH

SEATED LEG CURL - Knee Flexion

Muscles worked: This exercise emphasizes the hamstring muscle group (biceps femoris, semimembranosus, semitenonosis) on the back of the thigh.

Starting position:

- Remove the bench, unlock the seat.
- Attach one end of the belt to a pulley, sit on the seat facing away from the Power Rods, position the belt around your midsection and then attach the free end of the belt to the other pulley.
- Move forward and secure your heels over the rail support at the end of the unit.
- Lift your chest, tighten your abdominals and maintain a very slight arch in your lower back.

Action:

- Slowly bend your knees, pulling yourself forward toward your feet.
- Slowly allow your legs to straighten and return to the starting position.

Key points:

- Make sure that you straighten your legs under control, do not allow your knees to hyperextend.
- Keep your chest lifted, abs tight and maintain a very slight arch in your lower back.



START



FINISH

STANDING HIP EXTENSION (Knee stabilized)

Muscles worked: This exercise strengthens and develops the muscles of your buttocks (gluteus maximus) and the hamstring muscle group (biceps femoris, semimembranosus, semitenonosis) on the back of the upper leg. Remember, there is no such thing as "spot reduction". Do not do this exercise with the belief that it will remove fat from this area. Do it to strengthen and build these muscles.

Starting position:

- Remove the bench.
- Facing the power rods, stand on the platform to one side of the rail.
- Secure the cuff around the ankle furthest from the rail. Keep this leg straight but not locked at the knee.
- Bend over 30 - 45 degrees from your hips (not your waist) and very slightly bend the knee of your support leg.
- Keep your spine in good posture, with your chest lifted, abs tight and maintain a very slight arch in your lower back.

Action:

- Initiate the movement by tightening your glutes. Extend your hip by moving your entire leg backwards, then slightly up.
- Slowly move your leg as far as you can, without allowing ANY movement to occur at your waist.
- Then slowly return to the starting position.

Key points:

- Make sure all of your motion occurs at your hip, NOT your waist or lower back.
- Keep your abs tight throughout the entire exercise.
- Keep your working leg straight or very slightly bent.

Leg Exercises

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SEATED (STRAIGHT LEG) CALF RAISE - Ankle Plantarflexion (knee stabilized)

Muscles worked: This exercise is great for emphasizing the muscles of your lower leg or calf (gastrocnemius and soleus), that are responsible for raising and lowering your heels at the ankle joint. Strength and power in these muscles are essential for all sports and daily activities.

Starting position:

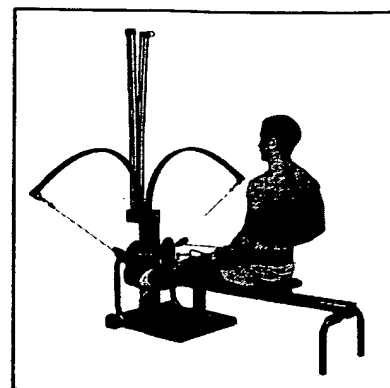
- Remove the bench and unlock the rowing seat.
- Sit on the seat facing the power rods with the leg press belt attached and adjusted.
- Place the balls of your feet on the upright pulley frame as shown.
- Lift your chest, tighten your abs and maintain a very slight arch in your lower back.
- Push back and straighten your legs, but do not lock your knees.
- You may rest your hands around the sides of the belt, on the sides of the seat, or you may fold your arms across your chest, whichever is more comfortable.

Action:

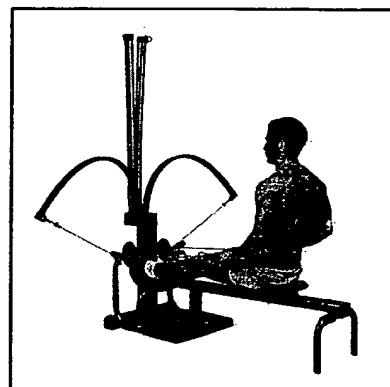
- Slowly press the balls of your feet into the frame and pull your heels towards your knees
- Slowly return to the starting position without relaxing.

Key points:

- Do not lose contact between the balls of your feet and the frame as you push.
- Do not change your hip or knee position, ONLY ankle motion should be allowed.



START



FINISH

LEG KICKBACK (Hip and knee extension)

Muscles worked: This exercise strengthens and develops the muscles of your buttocks area (gluteus maximus). Remember, there is no such thing as "spot reduction". Do not do this exercise if you believe it will remove fat from this area. Do it to strengthen and build these muscles.

Starting position:

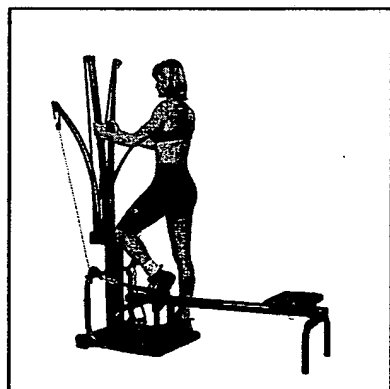
- Remove the bench.
- Facing the Power Rods, stand on the platform to one side of the rail.
- Secure the cuff around the ankle furthest from the rail. Keep this leg bent at approximately 90 degrees.
- Bend over 30 - 45 degrees from your hips (not your waist) and very slightly bend the knee of your support leg.
- Keep your spine in good posture, with your chest lifted, abs tight and maintain a very slight arch in your lower back.

Action:

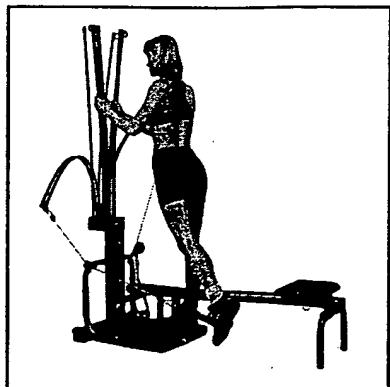
- Extend your entire leg backwards, straightening the knee.
- Slowly move your leg as far as you can, without allowing ANY movement to occur at your waist.
- Then slowly return to the starting position.

Key points:

- Do not allow your waist, lower back or supportive hip to move.
- Keep your abs tight throughout the entire exercise.

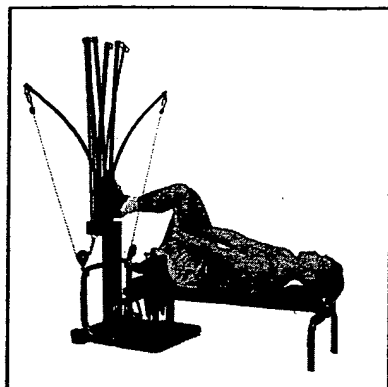


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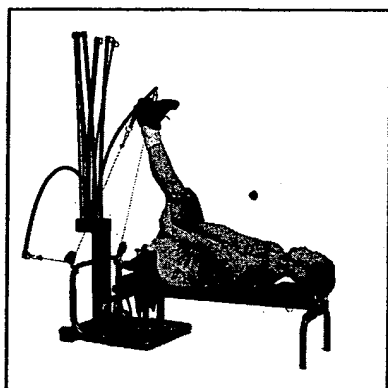


FINISH

Leg Exercises



START



FINISH

LYING LEG EXTENSION

Muscles worked: This exercise allows you to strengthen and develop the front part of your upper thighs (quadriceps muscle groups), helping to increase your muscular stability at the knee joints.

Starting position:

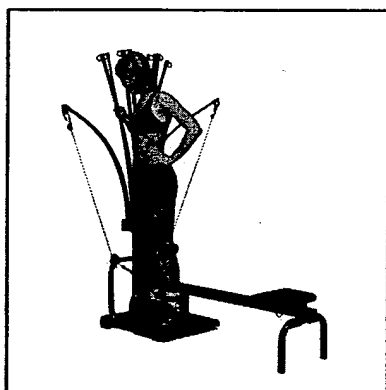
- Sit on the bench facing the power rods and attach the handle to the corresponding ankle.
- Lie back on the bench so that your head is supported by the bench.
- Bend your working leg at the knee and bend your hip until your knee is pointing up, keeping your lower leg relaxed.
- Grasp your working thigh with both hands around the back of the knee.
- Place the uninvolved foot on the floor or bench, relax your neck, straighten your spine, lift your chest, tighten your abs, and maintain a very slight arch in your lower back.

Action:

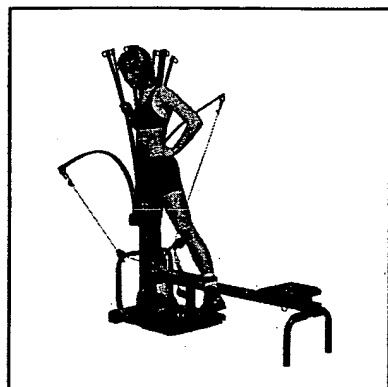
- Slowly straighten your leg, moving only your knee/lower leg.
- Slowly return to the starting position without relaxing the quad.

Key points:

- Keep your upper thigh motionless throughout the exercise.
- Keep your spine in good posture with your chest lifted, abs tight and a very slight arch in your lower back.



START



FINISH

STANDING HIP ABDUCTION

Muscles worked: This exercise will not burn off fat from your hips or "outer thighs"! There is no exercise that will burn fat from a specific area. This exercise will, however, strengthen the muscles on the sides of your hips (gluteus medius), especially on the standing/support side. Use very light resistance and small range of motion on this exercise. Think of this exercise as a tool for challenging your ability to stabilize your hip on the supportive leg. There is virtually no other benefit.

Starting position:

- Remove the bench, stand with one side near the Power Rods, and attach a handle /strap to the ankle furthest from the machine (outside leg).
- Stand up straight, lift your chest, tighten your abs and maintain a very slight arch in your lower back.
- Adjust your position so that there is some resistance in the cables.
- In the beginning, you may hold on to the Power Rods for added stability.

Action:

- Slowly move the attached leg outward to the side away from the pulley (30-45 degrees), keeping your hips and spine perfectly still.
- Slowly return to the starting position without relaxing.

Key points:

- Do not use this exercise for losing fat from your hips. It will not make your hips smaller. Use it to develop hip strength and stability.
- Use a very small range of motion. More is not better.
- Keep your spine straight and your hips level. Try not to raise your hips when raising your leg to the side.

SEATED HIP ADDUCTION

Muscles worked: This exercise will not burn off fat from your inner thighs or make them smaller! There is no exercise that will burn fat from a specific area. This exercise will, however, strengthen the muscles on the insides of your thighs (adductor muscle groups). Use very light resistance and small range of motion on this exercise.

Starting position:

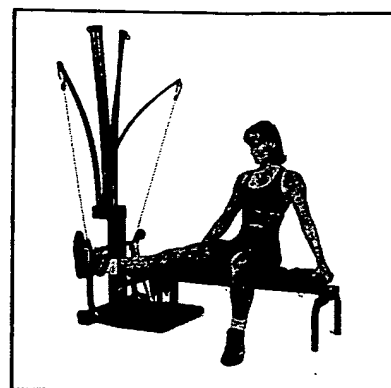
- Sit one side near the Power Rods, and attach a handle/strap to the ankle nearest the machine (inside leg).
- Sit straight, lift your chest, tighten your abs and maintain a very slight arch in your lower back.
- Adjust your position away from the machine so that there is room to move the attached leg toward the pulley.
- In the beginning, you may hold on to the bench for added stability.

Action:

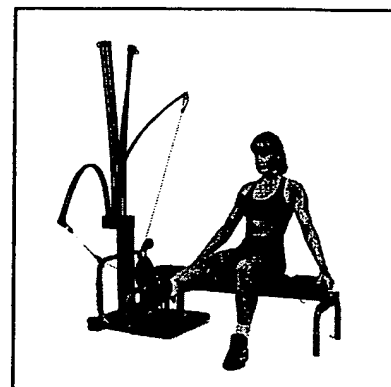
- Slowly allow the attached leg to move outward towards the pulley (30-45 degrees), keeping your hips and spine perfectly still.
- Then slowly draw the leg back toward the support leg, returning to the starting position.

Key points:

- Do not use this exercise for losing fat from your thighs. It will not make your thighs smaller. Use it to develop hip strength and stability.
- Do not cross the attached leg in front of the standing leg. Use a very small range of motion. More is not better.



START



FINISH

ANKLE INVERSION

Muscles worked: This exercise strengthens and develops the muscles on the inside of your lower legs (tibialis anterior and posterior). These muscles are essential for standing balance and lateral agility of the ankle.

Starting position:

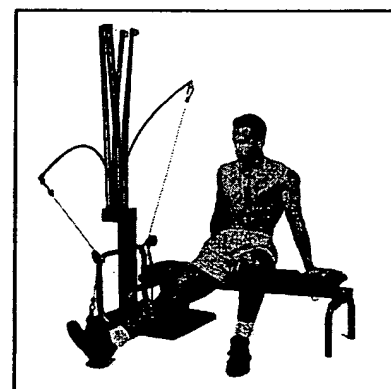
- Sit on the bench with one side of your body facing the power rods.
- Attach the handle around the ball of the foot closest to the pulley.
- Straighten the attached leg and sit up straight.
- Allow the foot to rotate towards the power rods, keeping tension in the cables.

Action:

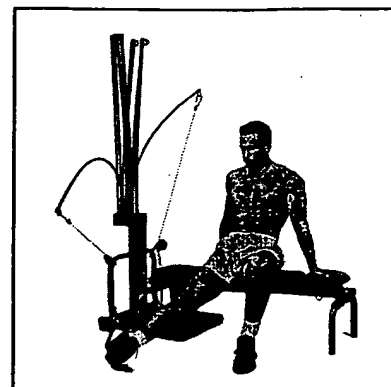
- Keeping your leg stationary, slowly rotate your foot away from the power rods.
- Slowly return to the starting position without relaxing.

Key points:

- Movement should occur only at the ankle, keep the rest of your body motionless.
- You should feel tension in the inside of your calf throughout the entire motion.

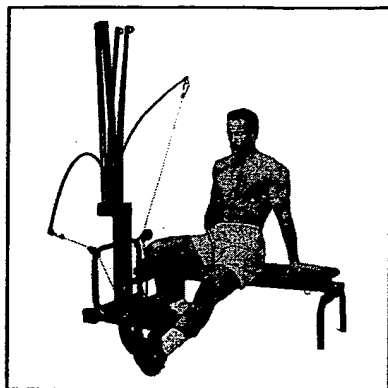


START

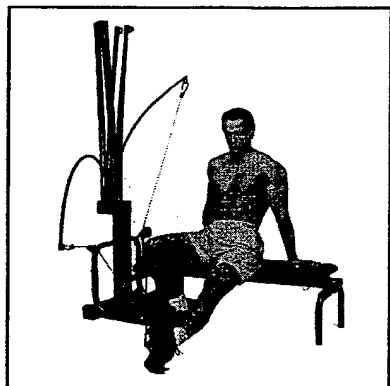


FINISH

Leg Exercises



START



FINISH

ANKLE EVERSION

Muscles worked: This exercise strengthens and develops the muscles on the outside of your lower legs (peroneals). These muscles are essential for standing balance and lateral agility of the ankle.

Starting position:

- Sit on the bench with one side of your body facing the power rods.
- Attach the handle around the ball of the foot furthest from the pulley.
- Straighten the attached leg and sit up straight.
- Allow the foot to rotate inward towards the Power Rods.

Action:

- Keeping your leg stationary, slowly rotate your foot outward, away from the Power Rods.
- Slowly return to the starting position without relaxing.

Key points:

- The only movement that occurs is at the ankle, keep the rest of your body/leg motionless.
 - You should feel tension in the outside of your calf throughout the entire motion.
-

**Fast Fat Loss
Now!**

The Bowflex Body Leanness Program

By Ellington Darden, Ph.D.

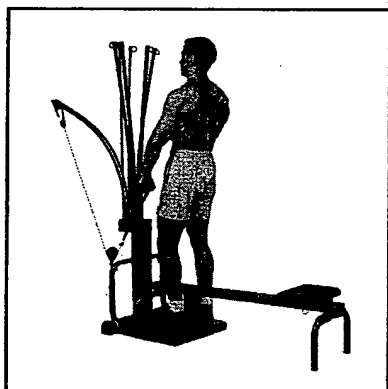
Fast Fat Loss Now

The following program was created by Dr. Ellington Darden. It contains a rigorous fitness and dietary program. Please consult your physician before beginning any fitness or dietary program.

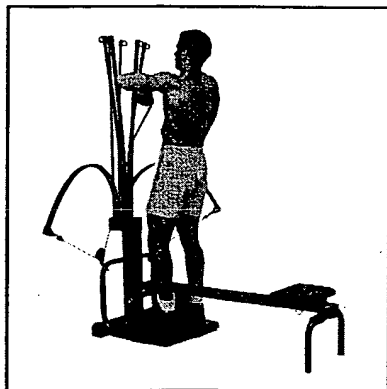
Some of the names of the exercises listed in this program have been changed in order to match the names of the exercises in this manual. The exercises themselves have NOT been changed, in order to preserve the integrity of Dr. Darden's Study.

The Upright Row exercise shown below was used in Dr. Darden's original study. Although many people have used this exercise for years, recent information in the Physical Therapy field has caused the authors of this manual to caution against performing this exercise because of the unnatural twisting movement created in the shoulder joint.

Bowflex Inc. suggests that you substitute the Front Shoulder Raise or the Rear Deltoid Rows for the Upright Row exercise.



START



FINISH

UPRIGHT ROW - Shoulder Abduction (elbow stabilized)

Muscles worked - This exercise emphasizes the side shoulder muscles (middle deltoids), the top muscle of the rotator cuff (supraspinatus) and the upper trapezius muscles.

Starting position:

- Remove the bench and stand on the platform straddling the rail and facing the Power Rods.
- Grasp the handles with palms facing towards each other.
- Attain good spinal posture and bend forward slightly at the hip (15 to 20 degrees) by keeping your spine straight and sticking your rear end out. Do not bend at your waist.
- Let your arms hang directly in line with the cables.
- Elevate your shoulders very slightly towards the back of your head.

Action:

- Raise your arms directly up to almost shoulder level.
- Keep the side of your arm/elbow facing out/up throughout the movement.
- Slowly bring your arms in to the starting position without relaxing.

Key points:

- DO NOT swing the arms upward or move the trunk during the motion.

A Personal Guarantee From Dr. Ellington Darden

55

Dear Bowflex Enthusiast,

I'm excited, really excited! I'm elated because I've developed an exercising and eating program that produces fat loss faster than any plan I've ever tested.

The men involved in my research, for example, had an average fat loss of 27.95 pounds per man. Women on the same program averaged a reduction of 16.96 pounds. Best of all, these dramatic results were achieved -- not in six months -- but in only six weeks!

That's right. Similar results can be accomplished by you in six short weeks, which include just 18 workouts (3 per week) on the Bowflex machine.

Bowflex was a significant part of the results. The exercises performed on it allowed the participants to build muscle, which accelerated their metabolisms, and produced faster and greater fat losses.

The plan worked so well that it became known as The Bowflex Body Leanness Program.

Leanness means to strip away the fat from under the skin as well as at deeper levels. Leanness also implies a pleasing shape and tone to the skeletal muscles.

You might say leanness is the opposite of fatness because the people involved in my research certainly got rid of their excessive fatness in record time.

All the guidelines that were applied have been organized in the booklet you are now holding in your hands. It's the next best thing to actually going through one of my research projects. In fact, it's probably better since nothing is experimental. All of the fine points have been, tried, tested, and proved effective.

If you are overfat, and if you are interested in doing this program, there are several things that you need to understand about my experience. Since 1965, I've trained more than 10,000 overfat individuals. After many years of pushing, coaxing, and listening to these trainees, certain traits became evident to me:

People are not lazy by choice. They are forced into it by the confusion that surrounds the abundance of fitness information that is available. If these individuals are given simple decisive instructions, they will train very intensely.

People, if they are provided with specific menus, will drastically alter their eating habits.

- Most of these people, however, will do neither of these challenging things for more than a week -- unless they quickly see and feel changes in their body.

The Bowflex Body Leanness Program emerged from these findings. For you to get the best-possible results, you must be willing to exercise very intensely on the Bowflex machine and adhere to a strict eating plan.

In return, you'll get simple exercise instructions, specific menus to use, and my guarantee that if you follow the program exactly as directed, you'll observe the pounds and inches disappear on almost a weekly basis.

Now it's your turn to get excited, and get started!

Sincerely,



Dr. Ellington Darden

Introduction

The Bowflex Body Leanness Program

This program is scientifically designed for maximal fat loss over six weeks. It is important that you practice every aspect of the plan to achieve optimum results.

The program separates into three two-week stages. During each stage you will exercise, control the number and quality of calories you consume, and drink plenty of ice-cold water.

Before starting the exercise routine you must be familiar with your Bowflex. You should experiment with finding the proper amount of resistance to use on each exercise. You should be able to perform 8 repetitions, but not more than 12 repetitions, for each exercise. It is essential that you learn how to perform each movement before trying a complete circuit, because part of the effectiveness of the training depends on minimal rest between each exercise.

Warning! Before beginning this program consult your physician or health-care professional. Show this plan and your Bowflex Owner's Manual to your physician or health-care professional. Only he or she can determine if this course is appropriate for your particular age and condition. If you experience any lightheadedness, dizziness, or shortness of breath while exercising, stop the movement and consult a physician.

Make sure you read your Bowflex Owner's Manual before attempting a workout.

*** There are a few people who should not try this program: Children and teenagers; pregnant women; women who are breast feeding; diabetics; individuals with certain types of heart, liver, or kidney disease; and those suffering from certain types of arthritis. This should not be taken as an all inclusive list. Some people should follow the course only with their physician's specific guidance. Play it safe and consult a health-care professional.

If you would like to measure your personal before-and-after results, there are several steps you need to take. It is important that you accurately perform each task, then at the end of the six-week program, repeat the process in the same manner.

Body Weight:

Remove clothing and shoes and record your weight to the nearest quarter pound. Be sure to use the same scale when weighing yourself at the end of the six-week program. For the most accurate recordings, weigh yourself nude in the morning.

Since the program is divided into three two-week segments, you may want to weigh yourself at the end of each two-week period. Understand, however that weight loss is not the best way to determine your success. Fat loss is the key component. To determine the amount of fat you've lost, you'll need to follow the instructions in the next section.

Enter your starting weight on your RESULTS SUMMARY SHEET, which is found on page 63.

Circumference of Body Parts:

For an even better idea of the changes that will occur to your body in the next six weeks, it is necessary to measure the circumference of certain body parts. This will tell you where the fat is shrinking and what areas are toning up.

Use a plastic tape to measure the following:

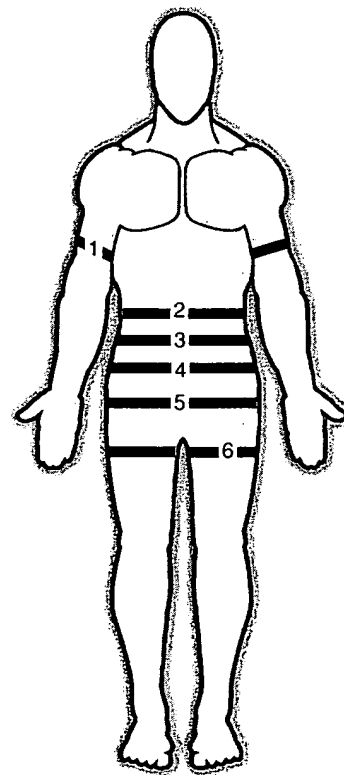
- 1) Upper arms -- hanging and relaxed, midway between the shoulder and elbow.
- 2) Two inches above navel -- belly relaxed.
- 3) At navel -- belly relaxed.

4) Two inches below navel -- belly relaxed.

5) Hips -- feet together at maximum protrusion of buttocks.

6) Thighs -- high, just below the buttocks crease with legs apart and weight distributed equally on both feet.

Record each measurement on your Results Summary Sheet.

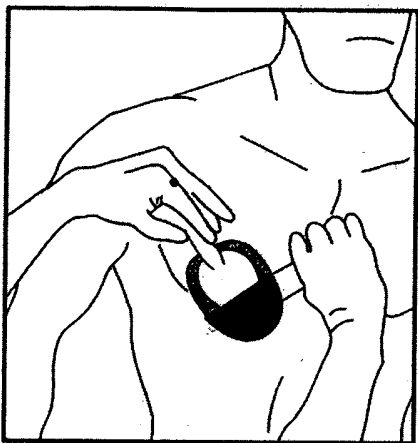


Measurements

Skinfold Measurements

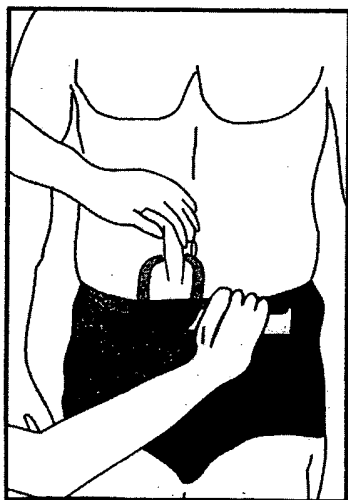
To accurately track your progress through this six-week program, it is necessary to take skinfold measurements. By measuring yourself in this way, you will be able to determine your lean-body mass and your body-fat percentage. The goal of this program is to increase your lean-body mass and decrease your body-fat percentage.

Please read this section carefully. Proper measuring techniques are essential to track your success. It is best to have someone measure you. Measuring yourself can lead to inaccurate results.



Chest

Stand relaxed. Pick up a diagonal skinfold over the right pectoralis muscle, midway between the armpit and the nipple.

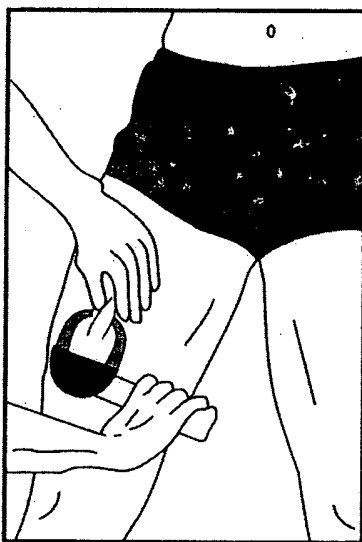


Abdomen

Stand relaxed. Pick up a vertical skinfold on the right side of the navel.

Women Measure:
suprailium, triceps, and thigh.

Men Measure: Chest,
abdomen, and thigh.



Thigh

Stand relaxed with most of the weight on your left leg. Pick up a skinfold in the vertical plane on the front side of the right thigh, midway between the hip and knee joints.



Suprailium

Stand relaxed. Pick up a diagonal skinfold just above the crest of the hip bone on the right side of the waist.



Triceps

Stand with right elbow flexed 90 degrees and locate the center of the back of the upper arm midway between the shoulder and the elbow. Relax arm at your side. Pick up skinfold as pictured.

Using Calipers When Measuring Skinfolts

The procedure for measuring skinfold thickness is to grasp firmly with the thumb and forefinger a fold of skin and surface fat and pull it away from the underlying muscle. Take the caliper in your other hand and open the jaws. Clamp the jaws over the pinched skin and fat. The jaws exert constant tension at the point of contact with the skin. The thickness of the double layer of skin and fat can then be read directly from the caliper, which is marked in millimeters.

Women

Suprailium _____

Triceps _____

Thigh _____

Total _____

Men

Chest _____

Abdomen _____

Thigh _____

Total _____

Use these figures on the following chart to determine your body-fat percentage and enter the number on the line below.

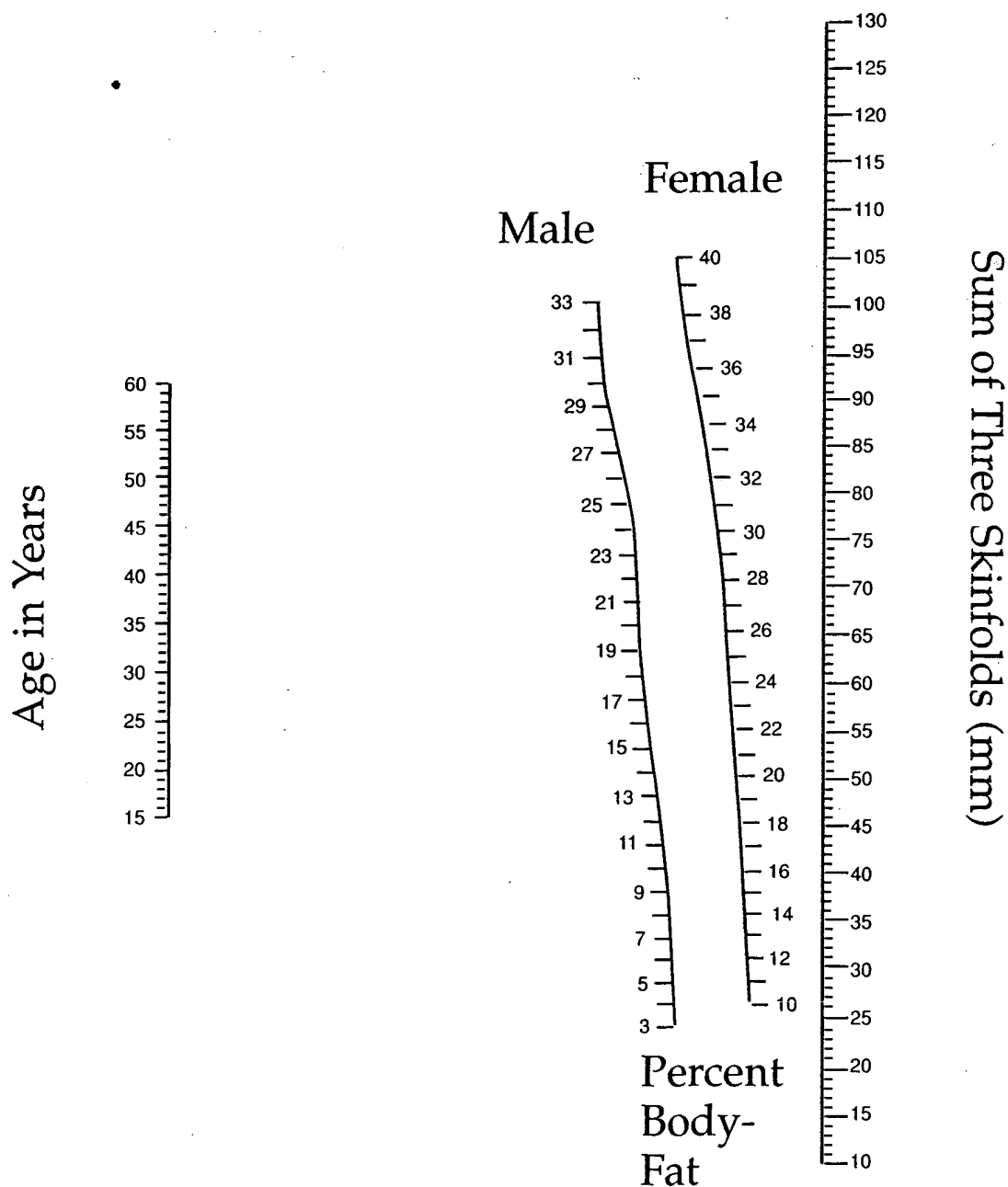
Starting body-fat percentage _____

Determining Your Body-Fat

To Use The Nomogram:

- 1) Locate the sum of your three skinfolds in the right column and mark it.
- 2) Locate your age in years on the far left column and mark it.
- 3) Connect the two marks with a straightedge. Where the straightedge intersects the line in the middle column appropriate to you, you will find your body-fat percentage.

Baun, W.D, Baun, M.R., and Raven, P.B. A nomogram for the estimate of percent body fat from generalized equations. *Research Quarterly for Exercise and Sport*, 52:380-384, 1981.



Calculating Lean Body Mass

61

Now that you know your body-fat percentage, you can calculate your lean-body percentage. This will eventually show you how many pounds of muscle were added to your body, after completing the program.

For Example:

Before the program, Joe weighs 200 pounds and measures 30% fat, which amounts to 60 pounds. Thus, his lean-body mass is 70% or 140 pounds.

After the program, Joe weighs 180 pounds and is 20% fat, which equals 36 pounds. His lean body mass is 80%, or 144 pounds.

Simple calculations allow us to find the amount of fat Joe lost, and the amount of muscle Joe gained. Before fat pounds (60), minus after fat pounds (36) equals 24 pounds of fat lost. After lean-mass pounds (144) minus before lean-mass pounds (140) equals 4 pounds of muscle gained.

Enter Your Information Here

Before

$$\frac{\text{Body Weight}}{\text{Fat Percentage}} = \text{Pounds of Fat}$$

$$\frac{\text{Body Weight}}{\text{Fat Pounds}} = \text{Lean-Body Weight}$$

Use the Same Factors to Calculate After Six Weeks.

After

$$\frac{\text{Body Weight}}{\text{Fat Percentage}} = \text{Pounds of Fat}$$

$$\frac{\text{Body Weight}}{\text{Fat Pounds}} = \text{Lean-Body Weight}$$

Final Results

$$\frac{\text{Before Fat Pounds}}{\text{After Fat Pounds}} = \text{Total Fat Lost}$$

$$\frac{\text{After Lean-Mass Pounds}}{\text{Before Lean-Mass Pounds}} = \text{Total Lean-Mass Gained}$$

Optional Picture Taking

Pictures can be the most exciting evaluation you can do. The numbers and the tape measurements are great, but actually seeing differences from comparison photographs of yourself is quite satisfying.

Taking full-length photographs is not difficult, but to see the maximum difference between before and after, you should follow these guidelines.

- 1) Keep everything the same. Wear the same outfit, a snug solid color is best, and have the person taking the picture stand in the same place, with the same setting behind you.
- 2) Make sure you stand against an uncluttered, light background.
- 3) Have the person taking the photograph move away from you until he can see your entire body in the viewfinder.
- 4) Stand relaxed for three pictures, front, right side, and back. Do not try to suck in your stomach.
- 5) Interlace your fingers and place them on top of your head, so the contours of your torso will be plainly visible. Keep your feet 8 inches apart in all three pictures.
- 6) When you get the film developed tell the processors to make your after photos the same size as your previous ones. This way, your height in both sets of photos is equal and more valid comparisons can be made.

Your Results Summary Sheet

Name _____ Age _____
Height _____ Weight Loss _____
Weight Before _____ Muscle Gain _____
Weight After _____ Fat Loss _____

Please follow the instructions on page 57 for measuring the circumferences.

Measurements	Before	After	Difference
Right Arm	_____	_____	_____
Left Arm	_____	_____	_____
2" Above Navel	_____	_____	_____
Navel	_____	_____	_____
2" Below Navel	_____	_____	_____
Hips	_____	_____	_____
Right Thigh	_____	_____	_____
Left Thigh	_____	_____	_____
		Total	_____
Percent Body Fat	_____	_____	_____

If you wish to send in your results to Bowflex, please send to: Bowflex Results, 2200 N.E. 65th Ave., Vancouver, WA. 98661. Or you may fax this sheet to Bowflex Results at 1-360-694-7755. Please include your name, address, and phone number. Submissions may be selected for use in promotional marketing materials.

The Workouts

GUIDELINES Week 1&2

All exercises should be practiced with one set of 8 to 12 repetitions. The style of performance is very important. The movement for each repetition should be 4 seconds in the positive phase and 4 seconds in the negative. Keep the motion slow and smooth. When 12 repetitions are accomplished, increase the resistance by approximately 5 percent. Keep the time between exercises to a minimum, no longer than 60 seconds. No workout should take more than 30 minutes to complete. Perform each workout three days a week.

Exercise	Sets	Reps	Page
Leg Curl	1	8-12	45
Leg Extension	1	8-12	45
Bench Press	1	8-12	18
Lying Biceps Curl	1	8-12	41
Lying Shoulder Pullover	1	8-12	20
Seated (resisted) Abdominal Crunch	1	8-12	43

GUIDELINES Week 3&4

All exercises should be practiced with one set of 8 to 12 repetitions. The style of performance is very important. The movement for each repetition should be 4 seconds in the positive phase and 4 seconds in the negative. Keep the motion slow and smooth. When 12 repetitions are accomplished, increase the resistance by approximately 5 percent. Keep the time between exercises to a minimum, no longer than 45 seconds. No workout should take more than 30 minutes to complete. Perform each workout three days a week.

Exercise	Sets	Reps	Page
Leg Curl	1	8-12	45
Leg Extension	1	8-12	45
Bench Press	1	8-12	18
Lying Biceps Curl	1	8-12	41
Lying Shoulder Pullover	1	8-12	20
Upright Row*	1	8-12	*
Lying Triceps Extension	1	8-12	35
Seated (resisted) Abdominal Crunch	1	8-12	43

* Bowflex suggests that you substitute the Upright Row exercise with the Front Shoulder Raise (page 21) or Rear Deltoid Rows (page 22).

GUIDELINES Week 5&6

All exercises should be practiced with one set of 8 to 12 repetitions. The style of performance is very important. The movement for each repetition should be 4 seconds in the positive phase and 4 seconds in the negative. Keep the motion slow and smooth. When 12 repetitions are accomplished, increase the resistance by approximately 5 percent. Keep the time between exercises to a minimum, no longer than 30 seconds. No workout should take more than 30 minutes to complete. Perform each workout three days a week.

Exercise	Sets	Reps	Page
Leg Curl	1	8-12	45
Leg Extension	1	8-12	45
Bench Press	1	8-12	18
Lying Biceps Curl	1	8-12	41
Lying Shoulder Pullover	1	8-12	20
Reverse Fly	1	8-12	27
Upright Row*	1	8-12	*
Lying Triceps Extension	1	8-12	35
Seated (resisted) Abdominal Crunch	1	8-12	43

* Bowflex suggests that you substitute the Upright Row exercise with the Front Shoulder Raise (page 21) or Rear Deltoid Rows (page 22).

Eating Guidelines

You will be following a reduced-calorie nutrition program, which is divided into three two-week segments. The program is a proven method for achieving maximal fat loss over a six-week period. It consists of a carbohydrate-rich, descending-calorie eating plan, and a superhydration routine.

Follow a Carbohydrate-Rich, Descending-Calorie Eating Plan:

Approximately 60 percent of the daily calories should be from carbohydrates. The other 40 percent will be equally divided between proteins and fats. The 60:20:20 ratio of carbohydrates, proteins, and fats is ideal for maximum fat loss.

Keep Menus Simple and Food Substitutions to a Minimum:

Research has established that successful dieters prefer the same foods each day for breakfast and lunch. They like variety, however, for dinner. Detailed menus and food choices are included later in this manual.

If you must vary from the menu items, try to stay within the 60:20:20 ratio of carbohydrates, proteins and fats.

For Example			
Daily Amount	Carbohydrate	Protein	Fat
Calories	60%	20%	20%
2000	1200	400	400
1900	1140	380	380
1800	1080	360	360
1700	1020	340	340
1600	960	320	320
1500	900	300	300
1400	840	280	280
1300	780	260	260
1200	720	240	240
1100	660	220	220
1000	600	200	200

Avoid Too Much Stress:

Too much stress of any kind can cause the body to actually preserve fat stores. You should relax more. An after-dinner walk at a leisurely pace is helpful. Extra sleep is suggested, since sleep facilitates fat loss and muscle recovery. Furthermore, to keep the body well rested, ***no other exercises or activities are allowed during the six-week program.*** This is a scientifically proven program that works. More is not better. Any additional exercise other than the amount recommended can and will harm your fat loss.

Drinking plenty of water is essential to the success of this program. Drinking the recommended amount of water can seem like a challenge at first. Stick with it. Carry a large sports bottle or similar item with you throughout the day. After several weeks, you will find that you actually thirst for more and more water, and the amounts recommended are easily reached.

Superhydration aids fat loss in a number of ways. First, the kidneys are unable to function without adequate water. When they do not work to capacity some of their load is dumped onto the liver.

This diverts the liver from its primary function, which is to metabolize stored fat into usable energy. Because it's performing the chores of the water-depleted kidneys, the liver metabolizes less fat.

Second, overeating can be averted through water intake, as water can keep the stomach feeling full and satisfied between meals.

Third, ice-cold water requires calories to warm it to core body temperature. In fact, **1 gallon of ice cold water generates 123 calories of heat energy.**

You'll be drinking from 1 to 1 5/8 gallons of water each day on the following superhydration schedule:

Week 1 = drink 4 32-ounce bottles of ice-cold water per day.

Week 2 = drink 4.5 32-ounce bottles of ice-cold water per day.

Week 3 = drink 5 32-ounce bottles of ice-cold water per day.

Week 4 = drink 5.5 32-ounce bottles of ice-cold water per day.

Week 5 = drink 6 32-ounce bottles of ice-cold water per day.

Week 6 = drink 6.5 32-ounce bottles of ice-cold water per day.

Don't be surprised if you have to make more than a dozen trips to the restroom, especially during the first week of the program. Remember, your body is an adaptive system, and it will soon accommodate the increased water consumption.

Note: Although it is doubtful that you could ever drink too much water, a few ailments can be negatively affected by large amounts of fluid. For example, anyone with a kidney disorder, or anyone who takes diuretics, should consult a physician before going on the recommended water-drinking schedule. If you have any doubts about the recommendations, play it safe and check with your doctor.

The Eating Plan

The menus in the Bowflex eating plan are designed for maximum fat-loss effectiveness and nutritional value. For best results, follow them exactly.

Every attempt has been made to utilize current popular brand names and accurate calorie counts, which are listed in the menus. But as you probably realize the products are sometimes changed or discontinued. If a listed item is not available in your area, you'll need to substitute a similar product. Become an informed label reader at your supermarket. Ask questions about any products you don't understand. Supermarket managers are usually helpful. If they don't have an answer to your question, they will get it for you.

Each day you will choose a limited selection of foods for breakfast and lunch. Most people can consume the same basic breakfast and the same basic lunch for months with little modification. Ample variety during your evening meal, however, will make daily eating interesting and enjoyable. Additionally, the eating plan includes a mid-afternoon and late-night snack to keep your energy high and your hunger low.

Begin Week 1 on Monday and continue through Sunday. Week 2 is a repeat of Week 1. Calories for each food are noted in parentheses. A shopping list follows on page 71.

The eating plan for the next six weeks descends:

Week 1 & 2:

Men 1500 calories per day.

Women 1200 calories per day.

Week 3 & 4:

Men 1400 calories per day.

Women 1100 calories per day.

Week 5 & 6:

Men 1300 calories per day.

Women 1000 calories per day.

You'll always have a 300 calorie breakfast, a 300 calorie lunch, and a 300 calorie dinner (women), or 500 calorie dinner (men). With each two week descend, only your snack calories will change: from 400 to 300 to 200 calories per day (men), or 300 to 200 to 100 calories per day (women). For each of your five daily meals, you'll have at least three choices.

Everything has been simplified so even the most kitchen-inept man or woman can succeed. Very little cooking is required. All you have to do is read the menus, select your food choices, and follow the directions. It's as simple as that.

If you find that you wish to vary from the outline menu items try to stay with in the 60:20:20 ratio of carbohydrates, proteins, and fats.

Breakfast = 300 calories. Choice of bagel, cereal or shake.

Bagel

1 plain bagel, Sarah Lee (frozen) (210)
3/4 ounce light cream cheese (45)
1/2 cup orange juice, fresh or frozen (55)
Any beverage without calories, caffeine, or sodium, such as decaffeinated coffee or tea.

Cereal

1.5 ounces (42 grams) serving equals approximately 165 calories.
Choice of one: Kellogg's Cracklin' Oat Bran, General Mills Clusters, Post Honey Bunches of Oats, General Mills Honey Nut Cheerios
1/2 cup skim milk (45)
3/4 cup orange juice (82)
Noncaloric beverage

Shake (choice of one)

Banana-Orange

1 large banana (8 3/4 inches long) (100)
1/2 cup orange juice (55)
1/2 cup skim milk (45)
2 tablespoons wheat germ (66)
1 teaspoon safflower oil (42)
2 ice cubes (optional)
Place ingredients in blender. Blend until smooth.

Chocolate or Vanilla

1 packet Carnation Instant Breakfast, Ultra Slim-Fast, or another diet shake powder that contains the appropriate calories (100)
1 cup skim milk (90)
1/2 large banana (8 3/4 inches long) (50)
1 teaspoon safflower oil (42)
1 teaspoon Carnation Malted Milk powder (20)
2 ice cubes (optional)
Place ingredients in blender. Blend until smooth.

Lunch = 300 calories. Choice of one of three meals:

Sandwich

2 slices whole-wheat bread (140)
2 teaspoons Promise Ultra Vegetable Oil Spread (24)
2 ounces white meat (about 8 thin slices), chicken or turkey (80)
1 ounce fat-free cheese (1 1/2 slices) (50)
(Optional: Add to bread 1 teaspoon Dijon mustard (0))
Noncaloric beverage

Soup (choice of one)

Healthy Choice Turkey Vegetable, 15-ounce can (240), or Campbell's Healthy Request Hearty Chicken Rice, 16-ounce can (240)
1 slice whole-wheat bread (70)
Noncaloric beverage

Chef Salad

2 cups lettuce, chopped (20)
2 ounces white meat, chicken or turkey (80)
2 ounces fat-free cheese (100)
4 slices tomato, chopped (28)
1 tablespoon Italian, fat-free dressing (6)
1 slice whole-wheat bread (70)
Noncaloric beverage

Mid-Afternoon Snack

Men = 200 calories for Weeks 1&2; 150 calories for Weeks 3&4; 100 calories for Weeks 5&6.
Women = 150 calories for Weeks 1&2; 100 calories for Weeks 3&4; 50 calories for Weeks 5&6.

1 large banana (8 3/4 inches long) (100)
1 apple (3-inch diameter) (100)
1/2 cantaloupe (5-inch diameter) (94)
5 dried prunes (100)
1 ounce (2 small 1/2 ounce boxes) raisins (82)
1 cup light, nonfat, flavored yogurt (100)

The Eating Plan

Dinner = 500 or 300 calories.

Men = 500 calories, Women = 300 calories

Choice of one of three meals:

Tuna Salad Dinner

In a large bowl, mix the following:

- 1 6-ounce can chunk light tuna in water (180)
- 1 tablespoon Hellmann's Light, Reduced-Calorie Mayonnaise (50)
- 2 tablespoons sweet pickle relish (40)
- 1/4 cup whole kernel corn, canned, no salt added (30)
- Noncaloric beverage
- Men add:
- 1/2 cup sliced white potatoes, canned (45)
- 2 slices whole-wheat bread (140)

Steak Dinner

- 3 ounces lean sirloin, broiled (176)
- 1/2 cup sweet peas, canned, no salt added (60)
- 1/2 cup beets, canned. (35)
- 1/2 cup skim milk (45)
- Noncaloric beverage
- Men add:
- 2 slices whole-wheat bread (140)
- 1 teaspoon Promise Ultra Vegetable Oil Spread (12)
- 1/2 cup skim milk (45)

Frozen Microwave Dinner

Choose one of five recommended meals:

Glazed Chicken Dinner, Lean Cuisine (240)

- 1/2 cup skim milk (45)
- Noncaloric beverage
- Men add:
- 2 slices whole-wheat bread (140)
- 2 teaspoons Promise Ultra Vegetable Oil Spread (24)
- 1/2 cup skim milk (45)

Lasagna with Meat Sauce, Lean Cuisine (240)

- 1/2 cup skim milk (45)
- Noncaloric beverage
- Men add:
- 2 slices whole-wheat bread (140)

2 teaspoons Promise Ultra Vegetable Oil Spread (24)

1/2 cup skim milk (45)

Macaroni and Cheese, Weight Watchers (260)

- 1/2 cup skim milk (45)
- Noncaloric beverage
- Men add:
- 2 slices whole-wheat bread (140)
- 2 teaspoons Promise Ultra Vegetable Oil Spread (24)
- 1/2 cup skim milk (45)

Broccoli & Cheddar Cheese Sauce over Baked Potato, Lean Cuisine Lunch Express (250)

- 1/2 cup skim milk (45)
- Noncaloric beverage
- Men add:
- 2 slices whole-wheat bread (140)
- 2 teaspoons Promise Ultra Vegetable Oil Spread (24)
- 1/2 cup skim milk (45)

Country Inn Roast Turkey Classic, Healthy Choice (250)

- 1/2 cup skim milk (45)
- Noncaloric beverage
- Men add:
- 2 slices whole-wheat bread (140)
- 2 teaspoons Promise Ultra Vegetable Oil Spread (24)
- 1/2 cup skim milk (45)

Late-Night Snack

Men = 200 calories for Weeks 1&2; 150 calories for Weeks 3&4; 100 calories for Weeks 5&6.
Women = 150 calories for Weeks 1&2; 100 calories for Weeks 3&4; 50 calories for Weeks 5&6.

Afternoon snacks on page 69, plus the following:

- 1/2 cup low-fat frozen yogurt (100)
- 2 cups light, microwave popcorn (100)

Quantities needed for listed items will depend on your specific selections. Review your choices and adjust the shopping list accordingly. It may be helpful for you to photocopy this list each week before doing your shopping.

Staples

Orange juice, skim milk, whole-wheat bread, Promise Ultra Vegetable Oil Spread, Italian Fat-free dressing, Dijon mustard, safflower oil, noncaloric beverages (tea, decaffeinated coffee, diet soft drinks, water)

Grains

Bagels, Sarah Lee (frozen)
Cereals -- 1.5 ounce serving equals approximately 165 calories; Kellogg's Cracklin' Oat Bran, General Mills Clusters, Post Honey Bunches of Oats, General Mills Honey Nut Cheerios.
Wheat germ, malted milk powder, popcorn (microwave light).

Fruits

Bananas, large (8 3/4 inches long), apples (3-inch diameter), cantaloupes (5-inch diameter), dried prunes, raisins.

Vegetables

Lettuce, tomatoes, whole kernel corn (canned no salt added), sweet peas, (canned no salt added), sliced white potatoes (canned), cut beets (canned).

Dairy

Yogurt (light nonfat), cream cheese (light), cheese (fat-free), low-fat frozen yogurt, Carnation Instant Breakfast packets, Ultra Slim-Fast Packets.

Meat, Poultry, Fish and Entrees

Chicken (thin sliced), Turkey (thin sliced), Tuna (canned in water), Sirloin steak (lean).

Canned soup -- Healthy Choice Turkey Vegetable, Campbell's Healthy Request Hearty Chicken Rice.

Frozen microwave dinners or entrees:
Lean Cuisine Glazed Chicken Dinner, Lean Cuisine Lasagna with Meat Sauce, Lean Cuisine Lunch Express Broccoli & Cheddar Cheese over Potato, Weight Watchers Macaroni and Cheese, Healthy Choice Country Inn Roast Turkey Classic.

Q. I often get headaches when I eat only 1000 calories a day. What should I do?

A. Your headaches may be caused by going longer than three hours between meals or snacks. Try spacing your meals and snacks where there are fewer hours between them.

Some people who are used to drinking regular coffee with caffeine notice headaches when they stop consuming coffee for several days. If this is the case with you, you might want to ease off the coffee more gradually.

Q. I don't like red meat. I notice that the Lean Cuisine Lasagna with Meat Sauce contains beef. What can I substitute for it?

A. Lean Cuisine has many other frozen dinners that you may substitute for Lasagna with Meat Sauce. Try to find one that contains the same calories, with approximately 15 to 20 percent of the calories coming from fat. Some of the Lean Cuisine dinners actually have too little fat for my nutritional requirements.

Q. May I have dinner for lunch and lunch for dinner?

A. Yes.

Q. I tend to get a headache when I drink cold water. Can I drink water without it being chilled?

A. Yes, but you won't get the 123 calories or more thermogenic effect from warming the cold water to core body temperature. Try a more gradual drinking of the cold water. You may have been consuming it too quickly.

Q. Is it possible to drink too much water?

A. Certainly. To do so, however, you'd probably have to drink four or five times as much per day as I'm recommending. There are a few ailments that can be negatively affected by large amounts of fluid. If you feel you have a problem, check with your doctor before starting the program.

Q. Is bottled water better than tap water?

A. Research shows that bottled water is not always higher quality water than tap water. The decision to drink bottled water or not is usually one of taste. If you dislike the taste of your tap water, then drink your favorite bottled water. But first you might want to try a twist of lemon or lime added to the water from your tap. Some people say it makes a significant difference in the taste.

Q. I'm a middle-age woman who gets black and blue marks on my legs when I diet. Am I doing anything wrong?

A. I doubt you are doing anything wrong. Such black and blue marks are usually the result of an increased level of estrogen circulating in your body, which weakens the walls of the capillaries and causes them to break under the slightest pressure. When this happens, blood escapes and a bruise occurs. Estrogen is broken down in the liver, and so is fat. When you are dieting, your liver breaks down the fat, leaving a lot more estrogen in the bloodstream.

It may be helpful to supplement your diet with a little extra vitamin C each day to help toughen the walls of the capillaries.

Q. I'm a 40-year-old woman with a teenage son and daughter. My husband and I both want to lose 10 pounds and the children would also like to lose some weight. Can I put the whole family on the program?

A. It would be great if you could, but you cannot. The number of calories per day is the problem. Teenagers require significantly more calories each day than 1500, which is the highest level. Check with a registered dietician (RD) for appropriate recommendations.

Your teenage son and daughter, however, could follow the Bowflex exercise routines.

Q. I'm afraid that I might get large, unfeminine muscles from some of the Bowflex exercises you recommend in this course. What can I do to prevent this from happening?

A. You are worrying about large muscles unnecessarily. Building large muscles requires two conditions. First, the individual must have long muscles and short tendons. Second, an abundance of testosterone must be present in the blood stream. Women almost never have either of these conditions.

Under no circumstances could 99.99 percent of American women develop excessively large muscles. Progressive resistance exercise such as Bowflex will make your muscles larger -- but not excessively large -- and larger muscles will make your body firmer and more shapely.

Q. Why is it so important that I perform the Bowflex exercises with a 4-second count on the lifting and lowering?

A. Because a slow, smooth 4-second lifting followed by a 4-second lowering involves more muscle fibers more thoroughly than faster speeds of movement. The more completely each involved muscle fiber works simply means you'll get better muscle-building results.

Q. I'm confused about how to breathe during each Bowflex exercise?

A. Let's say your goal is to do 10 repetitions on a specific Bowflex exercise that is performed in the recommended 4-second lifting and 4-second lowering style. Here are the proper breathing guidelines to follow:

- Breathe normally during the first five repetitions.
- Take shorter, more shallow breaths during the sixth, seventh and eighth repetitions.
- Emphasize exhalation more than inhalation, especially during the ninth and tenth repetitions. Focus on good form and slow movement.
- Do not hold your breath on any repetition. Practice relaxing your face and neck. Do not grit your teeth. Keep your eyes open and remain alert.

Q. I'm not as disciplined and patient as I'd like to be. How can I better stay on track with the program?

A. One suggestion is to team up with a partner.

Most people are more motivated and make better progress if they go through the program with a friend. In selecting a training partner, here are several things to keep in mind:

- Your partner should be similar to you in age and condition.
- Your partner should be serious about getting into shape and making a commitment. That commitment means you'll be exercising together one hour, three times per week. Each of your joint training sessions should take approximately 50 minutes: 25 minutes for your workout and 25 minutes supervising your partner's workout.
- Your partner should be someone with whom you'll share a spirit of cooperation, not competition.
- Your partner should not be your spouse, brother, sister, or other family member. You do not want normal interpersonal problems to interfere with the training.

Q. Why won't you allow me to do aerobic dancing on my off-days to speed up the loss of body fat?

A. Because doing so doesn't speed up fat loss. Aerobic dancing -- and other activities such as running, swimming, cycling, stair-stepping, and racquetball -- do not contribute significantly to the fat-loss process. In fact, when added to proper strength training they can actually retard the reduction of fat.

Fat loss is retarded in two ways. Too much repetitive activity prevents maximum muscle building by using up your recover ability. A well rested recover ability is necessary for muscle growth. Too much activity -- especially if you are on a reduced-calorie diet -- causes you to get the blahs and quickly lose your enthusiasm. If this

happens, you're sure to break your diet.

The primary purpose of this program is to lose fat in the most effective and most efficient manner. Fat loss is prioritized and maximized by building muscle at the same time. The muscle-building process is optimized by a well-rested recovery ability, which necessitates keeping your strenuous and moderately strenuous activities to a bare minimum.

Once you get your body fat to a low level, you can add other activities -- and I encourage you to do so -- to your weekly fitness schedule. For now, follow the plan exactly as directed.

Q. What happens after six weeks? How do I continue the program if I need to lose more weight?

A. You should repeat the program for as long as it takes you to reach your goal. For example, it took Barry Ozer three six week sessions -- 18 weeks -- to lose all of his excessive fat, which amounted to 75 pounds. There are, however, a few guidelines and modifications to apply.

Repeat the eating plan exactly as before. Men, go back to 1500 calories a day for two weeks. Women, go back to 1200 calories a day for two weeks. Then, descend your calories in the same manner.

Keep your superhydration schedule at the highest level. In other words, sip 1 5/8 gallons of ice-cold water each day.

Continue your Bowflex exercise routine at the highest level. Perform the same 10 exercises three times per week. Try to get as strong as you can in each exercise, while always focusing on the 4-second count in both lifting and lowering.

Q. I'm pleased that I lost the fat I wanted to lose. What do I do to maintain my new body weight?

A. Once you've lost your excessive fat, your next task is to maintain that status. Here are the adjustments you need to make to your current practices.

Adhere to a carbohydrate-rich, moderate-calorie eating plan. Instead of eating from 1000 to 1500 calories a day, you'll be consuming from 1600 to 2400 calories per day. Maybe you can eat even more after your new body weight has stabilized. Trial-and-error experimentation is a must. Women should start with 1600 calories, and men with 2000 calories per day. Note what happens after a week. If your body weight keeps going down, raise the calories by 100 or 200, depending on how much weight you lost during the last week. Soon, you should reach a level where your body weight stabilizes. That level is your daily calorie requirement. Naturally, you'll be able to consume other foods than those listed in the Bowflex eating plan. By then, however, you should know the value of being a smart shopper and a wise eater. Read labels. Compare nutritional information. Be conscious of the ideal 60:20:20 ratio for carbohydrates, proteins, and fats.

Eat smaller meals more frequently. You've been limiting your five meals per day to 300 calories if you're a woman, or 500 calories if you're a man. You may now up the calories by 100. What happens if during a single meal you eat more than 400 calories if you're a woman, or 600 calories if you're a man? Don't panic. Simply understand that you will sometimes backslide. Learn to anticipate these urges and take corrective action.

Drink at least 1 gallon of cold water each day. You should realize by now the benefits of consuming plenty of water each day. Make your water bottle a permanent part of your lifestyle.

Train on Bowflex at least twice a week. There are two primary differences between maintenance and strength-building routines. First, for maintenance, you do not have to increase the resistance each week or so. If you can do 100 pounds for 12 repetitions on the leg extension, then keep it on 100 pounds and do not go up to 105 pounds. You can maintain the 100-pound level much easier than you can increase it. Second, you do not need to train three times a week. You can maintain your strength at twice a week.

Add variety to your Bowflex routines. Now is the time to introduce more variety to your routines by adding some new exercises while removing some old ones. Below are two sample routines.

Maintenance Routine 1

1. Seated leg abduction
2. Seated leg adduction
3. Heel raise
4. Chest fly
5. Incline press
6. Shoulder pullover
7. Shoulder shrug
8. Biceps curl
9. Wrist curl
10. Wrist extension

Maintenance Routine 2

1. Leg curl
2. Leg extension
3. Crossover shoulder raise
4. Shoulder press
5. Seated row
6. Decline press
7. Reverse curl
8. Triceps press
9. Lying back extension
10. Lower abdominal pull

Look in your Bowflex Owner's Manual for descriptions of the new exercises.

Be consistent with your Bowflex exercising, healthy eating, and superhydrating -- and your accomplishments may well exceed your goals.

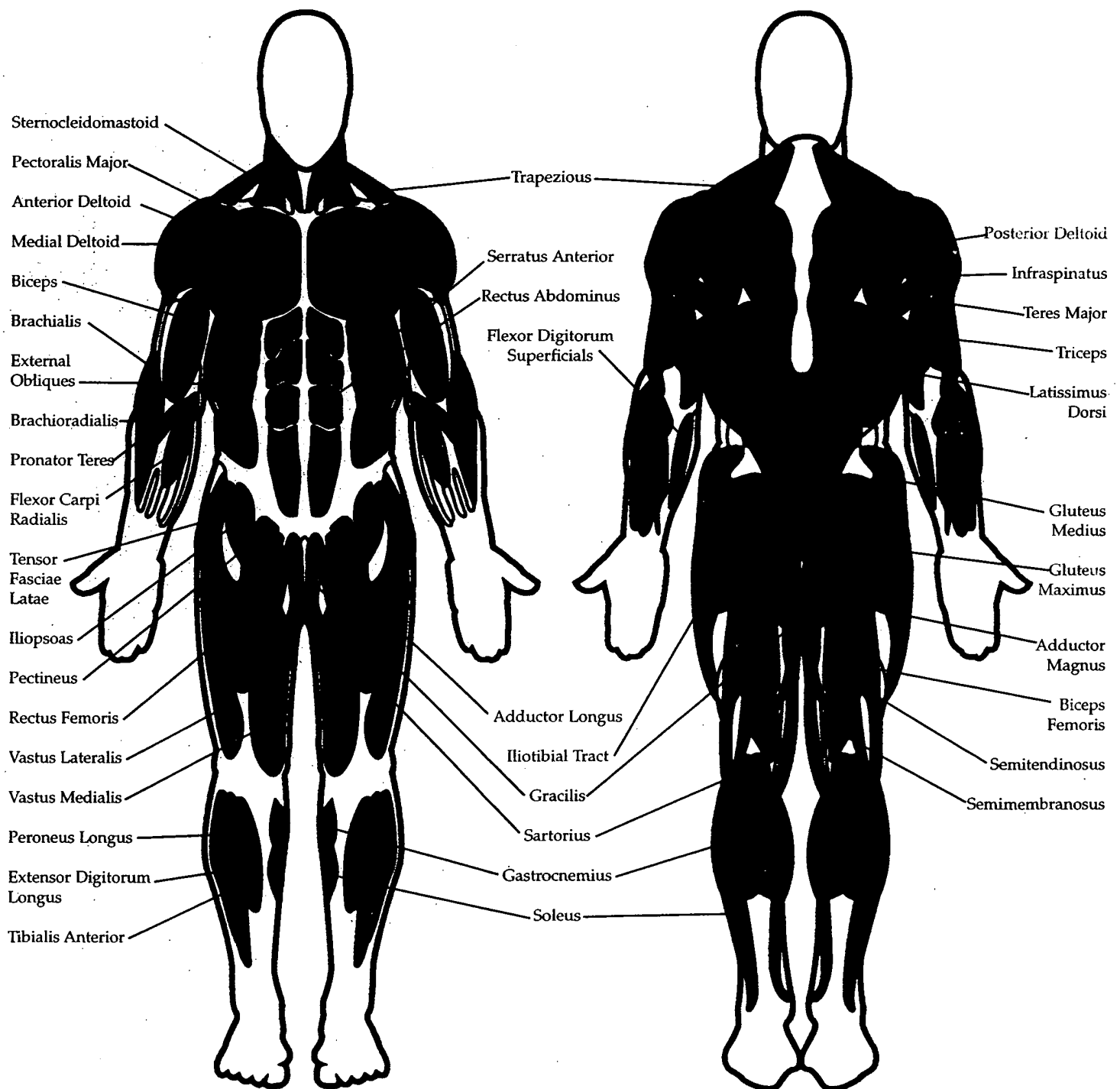
Exercise Log

Please feel free to make copies of this chart to continue your exercise log.

EXERCISE		DATE	DATE	DATE	DATE	DATE	DATE
<i>Bench Press</i>	Sets	2					
	Reps	10, 9					
	Resistance	120, 130					
	Sets						
	Reps						
	Resistance						
	Sets						
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	Sets						
	Reps						
	Resistance						

Muscle Chart

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This manual is written and designed by industry professionals. If you have any questions regarding your Bowflex or any instructions found in this manual please call 1-800-269-3539 for assistance.

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